

# **Notice of Project Change EOEEA #15060**

February 28, 2017

submitted to Executive Office of Energy and Environmental Affairs

submitted by Wynn MA, LLC

prepared by Fort Point Associates, Inc.

in association with Wynn Design & Development, LLC Howard/Stein-Hudson, Inc.
Amec Foster Wheeler

BOSTON HARBOR

REF 333.

Dint Associates, Inc.
Liveronmental Consulting Project Permitting



636277319



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REF 33. 714 Fo

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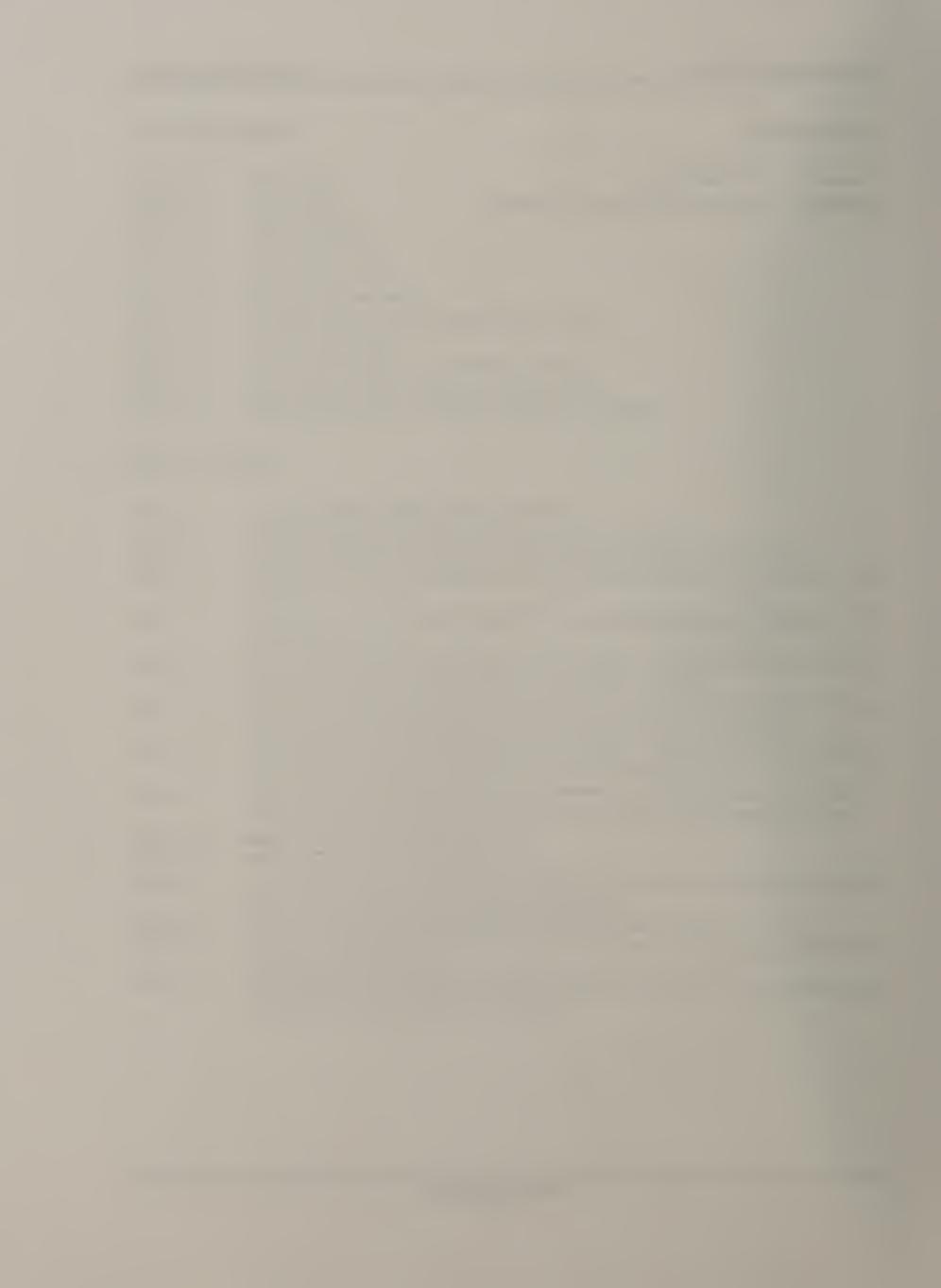
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NPC FORM



# Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs MEPA Office

# **Notice of Project Change**

The information requested on this form must be completed to begin MEPA Review of a NPC in

MEPA Analyst:
Phone: 617-626-

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Executive Office of Environmental Affairs

accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

EEA # 15060				
Project Name: Wynn Boston Harbor (FKA W	ynn Resort in Eve	erett)		
Street Address:1 Horizon Way				
Municipality: Everett, Massachusetts	Watershed: Mys	stic		
Universal Transverse Mercator Coordinates:	Latitude:42° 23	38" N		
	Longitude: 71°	04' 17" W		
Estimated commencement date: August 2016	Estimated comp	oletion date: Summer 2019		
Project Type: Mixed Use	Status of project	et design: 90 %complete		
Proponent: Wynn MA, LLC				
Street Address: 101 Station Landing - Suite 22	200			
Municipality: Medford	State: MA	Zip Code: 02155		
Name of Contact Person: Judith Kohn				
Firm/Agency: Fort Point Associates, Inc.	Street Address:	31 State Street		
Municipality: Boston	State: MA	Zip Code: 02109		
Phone: 617-357-7044 x 211 Fax: N/A		E-mail:jkohn@fpa-inc.com		
Phone: 617-357-7044 x 211				

<sup>1</sup> Project review thresholds identified in the EENF have been updated for this NPC Effective January 2011

- 301 CMR 11.03(3)(b)(3)
  - o Dredging of 10,000 or more cy of material
- 301 CMR 11.03(3)(b)(5)
  - Provided that a Chapter 91 License is required, new or existing unlicensed non-water dependent use of waterways or tidelands
- 301 CMR 11.03(3)(b)(6)
  - Construction, reconstruction or expansion of an existing solid fill structure of 1,000 or more sf base area or of a pile-supported or bottom-anchored structure of 2,000 or more sf base area, except a seasonal, pile-held or bottom-anchored float, provided the structure occupies flowed tidelands or other waterways
- 301 CMR 11.03(5)(b)(4)(a)
  - New discharge or expansion in discharge:
    - To a sewer system of 100,000 or more gpd of sewage, industrial waste water or untreated stormwater
- 301 CMR 11.03(6)(a)(6)
  - Generation of 3,000 or more new adt on roadways providing access to a single location
- 301 CMR 11.03(6)(a)(7)
  - o Construction of 1,000 or more New parking spaces at a single location

Which State Agency Permits will the project require?

- Massachusetts Department of Environmental Protection (DEP)
  - o Waterways Regulation Program (M.G.L. c.91) Chapter 91 Permit and or License
  - o DEP Air Quality (310 CMR 7.00) Notification of Construction and Demolition
- Massachusetts Office of Coastal Zone Management (CZM)
  - o (301 CMR 21.00) Federal Consistency Certification\*
- Board of Underwater Archaeological Resources (BUAR)
  - Review of proposed work and project site to determine potential for existence of underwater archaeological resources\*
- Massachusetts Historical Commission (MHC)
  - Determination of No Adverse Effect\*
- Massachusetts Department of Transportation (MassDOT)
  - o State Highway Access Permit for construction of off-site roadway improvements
- Massachusetts Water Resources Authority (MWRA)
  - o 8M Permit

- Massachusetts Department of Conservation and Recreation (DCR)

  o Permit for construction of off-site roadway improvements

  o Permit for extension of the Mystic River Reservation pedestrian and bicycle network

\*Not a Permit

## **PROJECT INFORMATION**

	In 25 words or less, what is the project change? The project change involves: Modifications to the program elements described in previous MEPA filings, including: adjustments to GFA and layout of program components, identification of sediment remediation areas and quantities, and identification of off-site resource area impacts.
l	See full project change description beginning on page 3.
	Date of publication of availability of the ENF in the Environmental Monitor: (Date: 6/12/13)
٧	Vas an EIR required?
H	lave other NPCs been filed? ☐Yes (Date(s): ) ⊠No
	this is a NPC solely for <u>lapse of time</u> (see 301 CMR 11.10(2)) proceed directly to <u>ATTACHMENTS &amp; SIGNATURES</u> .
L	PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed: dd w/ list of State Agency Actions (e.g., Agency Project, Financial Assistance, Land Transfer, List of Permits)
	Sediment Remediation will require new state permits: DEP Chapter 91 Waterways Permit or icense and Water Quality Certification.
o he o re re a 1	Are you requesting a finding that this project change is insignificant? A change in a Project is ordinarily insignificant if it results solely in an increase in square footage, linear footage, neight, depth or other relevant measures of the physical dimensions of the Project of less than 10% over estimates previously reviewed, provided the increase does not meet or exceed any review thresholds. A change in a Project is also ordinarily insignificant if it esults solely in an increase in impacts of less than 25% of the level specified in any eview threshold, provided that cumulative impacts of the Project do not meet or exceed any review thresholds that were not previously met or exceeded. (see 301 CMR 1.10(6)) Yes No; if yes, provide an explanation of this request in the Project Change Description below.
<u>F</u>	OR PROJECTS SUBJECT TO AN EIR
is	the project requires the submission of an EIR, are you requesting that a Scope in a previously ssued Certificate be rescinded?  Yes No; if yes, provide an explanation of this request
If	f the project requires the submission of an EIR, are you requesting a change to a Scope in a

previously	y issued Certificate?
Yes	☐No; if yes, provide an explanation of this request

#### **SUMMARY OF PROJECT CHANGE PARAMETERS AND IMPACTS**

Summary of Project Size	Previously	Net Change	Currently			
& Environmental Impacts	reviewed		Proposed			
LAND						
Total site acreage <sup>2</sup>	33.9	9.13	43.0			
Acres of land altered4	24.1	1.7	25.8			
Acres of impervious area	17.6	0	17.6			
Square feet of bordering vegetated wetlands alteration	N/A					
Square feet of other wetland alteration 5	83,280	223,119	306,399			
Acres of non-water dependent use of tidelands or waterways	10.74	0.45	11.19			
ST	RUCTURES					
Gross square footage	2,933,938	178,215	3,112,153			
Number of housing units	N/A					
Maximum height (in feet)	386	0	386			
TRAN	SPORTATION					
Vehicle trips per day 6	Friday	Friday	Friday			
	20,130	-2,580	17,550			
	Saturday	Saturday	Saturday			
	23,982	-3,416	20,566			
Parking spaces	2,936	-22	2914			
WATER/WASTEWATER						
Gallons/day (GPD) of water use	311,830	34,284	346,114			
GPD water withdrawal	N/A	X	X			
GPD wastewater generation/ treatment	283,482	31,167	314,649			
Length of water/sewer mains (in miles)	0.1	0	0.1			

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose

<sup>&</sup>lt;sup>2</sup> Project Site is previously reviewed

<sup>3</sup> Project Area includes off-site improvements: sediment remediation area in Boston, DCR Harborwalk Connector and landscape improvements in Boston

<sup>4</sup> Land above Mean High Water

<sup>&</sup>lt;sup>5</sup> Includes dredge and other off-site impacts

<sup>6</sup> Reflects adjusted trips after applied travel mode shares specific to the Project Site's location.

not in accordance with Article 97?   Tes No
2. release of any conservation restriction, preservation restriction, agricultural
preservation restriction, or watershed preservation restriction?
3. impacts on Rare Species <b>? ☐Yes ∑No</b>
4. demolition of all or part of any structure, site or district listed in the State Register of
Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
□Yes ⊠No
5. impact upon an Area of Critical Environmental Concern?
If you answered 'Yes' to any of these 5 questions, explain below:

<u>PROJECT CHANGE DESCRIPTION</u> (attach additional pages as necessary). The project change description should include:

- 1) a brief description of the project as most recently reviewed
- 2) a description of material changes to the project as previously reviewed,
- 3) if applicable, the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and
- 4) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a draft of the modified Section 61 Finding (or it will be required in a Supplemental EIR).

The purpose of this NPC is primarily to describe the proposed sediment remediation for marine sediments. While the need for this work is described in the FEIR and SFEIR, there was insufficient sediment testing and analysis at that time to fully describe the impacts and volume of dredge and cap required. The Proponent is proceeding with plans to complete remedial actions within a portion of the Project Site, and an adjacent off-site property on the Mystic River in order to comply with the MCP. Sediment remediation will occur in the vicinity of and within the Project Site. The planned solution will include dredging and capping an area of approximately 7 acres. Mechanical dredging is proposed for the area of sediment remediation. Proposed dredging depths are anticipated to be up to approximately 2 feet below the existing mudline or the previously reviewed elevation in the area of navigational dredging, with an anticipated over-dredge allowance of up to one foot. In addition to the previously reviewed and approved 17,335 cubic yards ("CY") of navigational dredging, approximately 36,030 CY of sediment are planned to be removed (for a total of approximately 53,365 CY of sediment). Included in the remediation dredge volume is a relatively small amount of sediment (approximately 2,000 CY), which may be removed to facilitate the demolition and removal of abandoned barges.

As the Project evolved through the design phase, the DEIR, FEIR, SFEIR, and SSFEIR each included refinements to the Project program as originally described in the EENF. While the core elements of the program (e.g., gaming, hotel, retail, meeting and event space, food and beverage, etc.) have not changed since the issuance of the SSFEIR Certificate, the Proponent has continued to refine the program and interior layout of the building to reflect current market conditions as they have changed since the filing of the EENF in 2013. Program changes, which are described in detail in the attached narrative, include a reduction in retail space, a reduction of hotel suites to provide for additional rooms, an increase in food and beverage space, and the addition of a larger luxury ballroom space and an increase in "back of house" support space. The square footage of each of the project components has been further defined and finalized as part of the design process, as can be expected in a project of this size and complexity. These changes are all within the footprint of the original proposal and, in total, reduce impacts as further discussed herein. A

modest increase of 6% in gross square feet has been the result of these minor changes.

Over the course of designing and preparing construction documents for the Project, a number of minor changes to the Project have also been incorporated into the Project site plans. These modifications will be the subject of minor modifications or amendments to certain permits. These include: adjustments to the elevation of the salt marsh to improve viability, minor changes to the docking and float systems to accommodate Americans with Disabilities Act ("ADA") and other passenger needs, and a minor reduction in the navigational dredge footprint.

See Attached NPC Narrative.

#### **ATTACHMENTS & SIGNATURES**

#### Attachments:

- 1. Secretary's most recent Certificate on this project
- 2. Plan showing most recent previously-reviewed proposed build condition
- 3. Plan showing currently proposed build condition
- 4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
- 5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures	3/28/17 Judith T. Kole
Date Signature of Responsible Officer Or Proponent	Date Signature of person preparing NPC (if different from above)
Robert DeSalvio	Judith T. Kohn
Name (print or type)	Name (print or type)
Wynn MA LLC	Fort Point Associates Inc

Wynn MA, LLC Firm/Agency	Fort Point Associates, Inc Firm/Agency
101 Station Landing, Suite 2200 Street	31 State Street 3 <sup>rd</sup> Floor Street
Medford, MA 02155 Municipality/State/Zip	Boston, MA 02109  Municipality/State/Zip
857-770-7000 Phone	617-357-7044 x 211 Phone

# Chapter 1

# PROJECT CHANGE DESCRIPTION



# CHAPTER 1: PROJECT CHANGE DESCRIPTION

Project Name:

Wynn Boston Harbor

Proponent:

Wynn MA, LLC

Address/Location:

One Horizon Way, Everett, Massachusetts

#### 1.1 PROJECT DESCRIPTION

As described in the MEPA filings, Wynn Boston Harbor (the "Project"), formerly the "Wynn Resort in Everett," is a luxury resort involving an investment of approximately \$2.4 billion to transform a blighted section of the City of Everett, Massachusetts, adjacent to the Mystic River, into a world-class destination. The Project will contribute hundreds of millions of dollars, including tens of millions of dollars for infrastructure, to the City of Everett, the region, and the Commonwealth of Massachusetts. The Project is being constructed on the contaminated site of a former chemical manufacturing plant totaling approximately 33.9 acres (the "Project Site"), and will include a luxury hotel, a gaming area, retail space, food and beverage outlets, meeting and event space, a spa and gym, a parking garage, and other complementary amenities. The Project will also include extensive landscape and open space amenities including a public gathering area with an outdoor park-like open space, a pavilion, waterfront features, a public harborwalk, and water transportation docking facilities which will reconnect the City of Everett to the Mystic River and Boston Harbor for the first time in generations. See Figures 1-1, USGS Locus; 1-2, Locus Aerial; and 1-3, SSFEIR Site Plan.

The Project will also include off-site improvements including extensive transportation improvements and a multiuse path from the Project's harborwalk to the existing paths at the Massachusetts Department of Conservation and Recreation ("DCR") Gateway Park (the "DCR Harborwalk Connector"). In addition, the Proponent has acquired the right to re-landscape certain adjacent properties as described herein. The Project, which is under construction, is being developed in a single phase with a planned opening in 2019.

The Project will anchor and support the Everett Lower Broadway Master Plan (the "LBD Plan") as well as the Everett Central Waterfront Municipal Harbor Plan (the "Everett MHP"), approved by the Secretary of Energy and Environmental Affairs (the "Secretary") on February 10, 2014, by stimulating development of the underutilized Mystic River waterfront, including the Project Site.

#### 1.2 MEPA HISTORY

This section provides a brief description of the Massachusetts Environmental Policy Act ("MEPA") documents and reviews (the "MEPA Filings") involving the Project.

#### 1.2.1 MEPA FILINGS AND PROCESS TO DATE

On May 31 2013, the Proponent filed an Expanded Environmental Notification Form ("EENF") for the Project with the Executive Office of Energy and Environment ("EOEEA"). The Secretary issued the Certificate on the EENF on July 26, 2013. On December 16, 2013, the Proponent filed a Draft Environmental Impact Report ("DEIR"). The Secretary issued a Certificate on the DEIR on February 21, 2014 setting forth a scope for a final environmental impact report. On June 30, 2014, the Proponent filed a Final Environmental Impact Report ("FEIR"). The Secretary issued a Certificate on the FEIR on August 15, 2014 specifying the scope for a supplemental final environmental impact report. On February 17, 2015, the Proponent filed a Supplemental Final Environmental Impact Report (the "SFEIR"). The Secretary issued a Certificate on the SFEIR on April 3, 2015 specifying a limited scope for a second supplemental final environmental impact report. On July 15, 2015, the Proponent filed a Second Supplemental Final Environmental Impact Report ("SSFEIR"). On August 28, 2015, the Secretary issued a Certificate finding that the Project "adequately and properly complies" with the Massachusetts Environmental Policy Act (G.L. c. 30, ss. 61-62l) and with its implementing regulations (301 CMR 11.00) (the "SSFEIR Certificate").

#### **Section 61 Findings**

In accordance with the SSFEIR Certificate, the State Agencies with permitting authority over the Project issued Section 61 Findings as follows:

- 1. Massachusetts Department of Transportation ("MassDOT") published draft Section 61 Findings in the Environmental Monitor on February 10, 2016 and February 24, 2016, and held a public hearing on March 10, 2016 to hear additional comments on the draft Section 61 Findings. MassDOT issued final Section 61 Findings on March 31, 2016, which were published in the Environmental Monitor on April 6, 2016.
- 2. Massachusetts Port Authority ("Massport") published draft Section 61 Findings in the Environmental Monitor on February 10, 2016. Final Section 61 Findings were adopted by Massport on January 21, 2016, and published in the Environmental Monitor on February 24, 2016.

- 3. Massachusetts Water Resources Authority ("MWRA") issued Section 61 Findings on January 12, 2016, which were published in the Environmental Monitor on January 20, 2016.
- 4. The Massachusetts Gaming Commission ("MGC") published draft Section 61 Findings in the Environmental Monitor on April 6, 2016, held a public hearing on March 29, 2016 to hear additional comments on the draft Section 61 Findings. Final Section 61 Findings were adopted by the MGC on April 25, 2016, and published in the Environmental Monitor on May 11, 2016.
- 5. The Massachusetts Department of Environmental Protection ("DEP") issued a Written Determination Pursuant to Chapter 91/Section 61 Finding and Combined Water Quality Certification/Section 61 Finding on January 22, 2016. The DEP Section 61 Findings were noticed in the Environmental Monitor on February 10, 2016.

Chapter 5 includes an accounting of the status and schedule for the comprehensive list of Project mitigation measures as identified in the MGC Section 61 Findings, which incorporates the mitigation measures of the other state agencies.

#### 1.3 CHANGES TO THE PROJECT AS PREVIOUSLY REVIEWED

#### 1.3.1 INTRODUCTION

With the exception of the sediment remediation activities, which are further described in Chapters 2, 3 and 4, no new state, federal or local permits will be required for the Project as a result of the Project refinements.

As the Project evolved through the design phase, the DEIR, FEIR, SFEIR, and SSFEIR each included refinements to the Project program as originally described in the EENF. While the core elements of the program have not changed (e.g., gaming, hotel, retail, meeting and event space, food and beverage, etc.), since the issuance of the SSFEIR Certificate, the Proponent has continued to refine the program and interior layout of the building to reflect current market conditions as they have changed since the filing of the EENF in 2013. These refinements are identified in the attached Notice of Project Change form as well as in this Section 1.3 and Table 1-1: Project Program Changes since the SSFEIR. See Figure 1-3, SSFEIR Site Plan.

#### 1.3.2 PROGRAM REFINEMENTS SINCE THE SSFEIR

The primary change in the program results from the reduction of retail space. Based on an assessment of current market conditions as they relate to the retail market and the demand in the Greater Boston area, the Proponent revised the program to reduce the retail component to create additional space for a more robust food and beverage

component. The food and beverage component has been increased to respond to the demand for food and beverage concepts that are more local in flavor.

In addition, the Proponent has re-evaluated the number of hotel suites and rooms in the Project. As previously discussed in prior MEPA Filings, the Project's average room size is larger than the market standard. As a result, the Proponent has reduced the number of suites in favor of individual rooms. This modification did not result in any changes to the design of the size or layout of the hotel tower, just a reconfiguration of the rooms. The increase in square footage results primarily from refined analysis of circulation and void space.

Further, during the design phase, the Proponent identified the need for a larger ballroom (meeting and event space). As a result, the Proponent adjusted the meeting and event space to incorporate a larger ballroom concept in addition to a series of smaller spaces.

As part of the design process, the Proponent reduced the number of gaming positions, but increased the size of the gaming floor to provide additional room for circulation.

Finally, the Proponent increased the size of the back-of-house to increase efficiency, including expanding back-of-house on the third floor, roof level, additional mechanical space, and reallocating below grade space to back-of-house.

These changes are all within the footprint of the original proposal and, overall, reduce Project impacts, as further discussed herein. As can be expected in a project of this size and complexity, the square footage of each of the project components has been further defined and advanced as part of the design process.

See Table 1-1 for a comparison of Project Program changes with the SSFEIR Program.

Table 1-1: Project Program Changes since the SSFEIR

Feature	SSFEIR Program	NPC Program	Change (Quantity)	Change (Square Feet)
Hotel Rooms	629	671	42	
Hotel Tower	621,774	663,200		41,426
Gaming	190,461	206,474		16,013
Total Gaming Positions	4,580	4,421	-159	
Retail (includes hotel and gaming areas)	52,632	9,177		-43,455

Feature	SSFEIR Program	NPC Program	Change (Quantity)	Change (Square Feet)
Food/Beverage	54,680	105,288		50,608
Event/Meeting	37,068	60,166		23,098
Spa/Gym	15,405	26,368		10,963
Back-of-House (includes MEP)	411,058	630,447		219,389
Front-of-House Support (includes restrooms, lobbies, etc.)	58,548	83,889		25,341
Total Parking Spaces	3,736	3,714	-22	
Lobby Lounge	841	0		-841
Indoor Pool Deck	10,485	0		-10,485
Indoor Garden	4,525	4,121		-404
Parking Spaces on-site	2,936	2,914	-22	
Parking Spaces off-site	800	800	0	
Parking Garage	1,476,461	1,323,023		-153,438
Total On-Site GFA	2,933,938	3,112,153		178,215

#### 1.3.3 OTHER MINOR PROJECT DESIGN MODIFICATIONS

Over the course of designing and preparing construction documents for the Project, a number of minor changes to the Project have been incorporated into the Project plans. These modifications will be the subject of minor modifications or amendments to certain permits. These include:

#### **Living Shoreline:**

- Below grade stone/sand Triton Marine Mattress geotextile fabric replaced with BioD-mat 90 woven coir mat in response to requests to remove nonbiodegradable materials during the permitting processes; and
- Modified the planting elevation for the new saltmarsh to fall slightly below the MHW line to improve the viability of the plantings.

#### **Docking System**

- Loading ramp and platform eliminated from the ferry landing float deck because they were not needed for side loading ferry vessels; and increased the length of the ferry landing float to accommodate the longer ADA ramp system needed for the reduced ferry landing float freeboard;
- Total floating dock system footprint increased by approximately 290 square feet (sf);
- Truncated the navigation dredge footprint by shifting the eastern limit toward the west, thereby reducing the footprint by approximately 5,500 sf and the estimated dredge volume by approximately 1,200 cy; and
- Added three dolphin piles to protect a stormwater outfall.

#### Garage

 Added an additional below-grade level and reduced footprint of parking garage with no reduction of parking spaces to reduce volume of material to be removed from the Project Site.

#### 1.3.4 OFF-SITE IMPROVEMENTS

#### **DCR Harborwalk Connector**

As described in previous MEPA Filings, the Project includes certain off-site improvements including a multiuse path connector ("Gateway Park Connector") from the Project's harborwalk to the existing paths at the DCR Gateway Park. The design and planning for the Gateway Park Connector, now described as the DCR Harborwalk Connector (the "Connector"), is being advanced by the Proponent as part of its mitigation commitments. During the course of advancing the planning for the Connector, the Proponent conducted topographic and wetland survey fieldwork on the site of the improvements. This fieldwork resulted in the identification of certain wetland resource areas that will be moderately impacted by the construction of the improvements. The prior MEPA Filings included information regarding the Proponent's plans to obtain environmental permits to construct the Connector. The permits required to construct the Connector have not changed. Table 1-2 includes a tabulation of resource areas expected to be impacted or enhanced by construction of the connector as compared with those impacts identified in the FEIR.

Table 1-2: Alterations to Resource Areas DCR Harborwalk Connector\*

State Resource Area Type	Permanent Impacts FEIR	Permanent Impacts NPC	Enhancement FEIR	Enhancement NPC	Activity
Coastal Bank	None	None	950±	2,401 ±	DCR Harborwalk Connector overlook at former bridge abutment
Land Subject To Coastal Storm Flowage	None	None	26,410±	47,460±	DCR Harborwalk Connector and landscaping
Riverfront Area	None	None	22,070 ±	9,890±	DCR Harborwalk Connector and landscaping
Buffer Zone to Coastal Bank	None	None	55,000±	115,160±	DCR Harborwalk Connector and overlook at former bridge abutment
Coastal Zone	None	None	3.6 ± acres	3.6 ± acres	DCR Harborwalk Connector and landscape improvements for public access to coastal views and parks
Salt Marsh	None	None	None	None	Overlook at former bridge abutment
Coastal Beach (Intertidal Zone MHW – MLW)	None	130±	None	None	Overlook at former bridge abutment
Land Under Ocean (Below MLW)	None	None	None	None	Overlook at former bridge abutment

<sup>\*</sup>Impacts in square feet unless noted

#### Off-Site Landscape and Pedestrian Enhancements

During the course of planning for optimal pedestrian connections and site improvements in locations surrounding the Project Site, the Proponent has identified areas adjacent to the Project Site for future provision of sidewalks and planting of lawn, trees, and shrubs. This 1.7  $\pm$  acre area is currently undeveloped, or used for construction staging. No permanent impacts to resource areas are anticipated to result from the planned landscape improvements. As was provided for with the Project's living shoreline, and expected to be included in the DCR Harborwalk Connector, restoration of Coastal Bank, plantings and public sidewalks will complete the Project's connection to the sidewalks on Route 99. See Figure 1 – 6 for the location of this offsite area. See Table 1-3 for areas of impact and restoration.

Table 1-3: Alterations to Resource Areas for Off-Site Landscape and Pedestrian Enhancements

State Resource Area Type	Permanent Impacts NPC	Enhancement NPC	Activity
Coastal Bank	None	3,378±	Plantings to provide restoration of deteriorated Coastal Bank area in the location of the sediment remediation Area
Land Subject To Coastal Storm Flowage	None	22,626 ±	Plantings to improve aesthetics and provide pedestrian access
Riverfront Area	None	2,500 ±	Plantings to improve aesthetics and provide pedestrian access
Buffer Zone to Coastal Bank	None	4,039 ±	Plantings to improve aesthetics and provide pedestrian access

<sup>\*</sup>Impacts in square feet unless noted

#### 1.3.5 SEDIMENT REMEDIATION

Sediment remediation was identified and addressed conceptually in the MEPA Filings. The discussions relating to sediment remediation were provided to inform the public and agencies about the status of remediation activities, with the understanding that the sediments on the water-side portion of the Former Everett Staging Yard had not yet been characterized and solutions to remediate impacted sediment had not been thoroughly detailed in the Massachusetts Contingency Plan ("MCP") documents. Since the filing of the SSFEIR, the plans for remediation of contaminated sediments have been further developed, and are discussed in Chapters 2.0, Regulatory

Requirements for Sediment Remediation, 3.0, Existing Conditions in the Sediment Remediation Area, and 4.0, Sediment Remediation Process, Impacts and Mitigation. Sediment Remediation activities, which will result in a benefit to the Mystic River, were identified on locations associated within the waterside portion of the Project Site as well as a 5-acre parcel located in the City of Boston. This 5-acre parcel was part of the former Everett Staging Yard which was the site of a former Monsanto chemical manufacturing facility (the "Disposal Site"). The sediment remediation activities were described in the FEIR and the SFEIR in broad terms, in anticipation of further MEPA filings and permit activities once the MCP process was further advanced. This NPC includes a detailed description of the planned sediment remediation activities.

#### **Proposed Sediment Remediation**

The Proponent is proceeding with plans to complete remedial actions within a portion of the Project Site, which is located on the Mystic River, in order to comply with the MCP. The remedial actions will take place, for the most part, on a portion of a parcel in Everett, Massachusetts identified as Assessor's Map H, Block 6, Parcel 191 owned by the Proponent and on a portion of a parcel in Boston, Massachusetts identified as Parcel 0201835000 owned by Everett Property, LLC, an affiliate of the Proponent. These areas comprise the Disposal Site. The Disposal Site, which is  $7.3 \pm$  acres, includes upland portions of the property as well as a portion of the sediment below Mean High Water ("MHW") in the Mystic River. For existing conditions, see Figure 3-1, Existing Conditions and Coastal Resource Areas. The area to be altered by the sediment remediation is defined as the "Remediation Area".

The Remediation Area is a  $7.0 \pm$  acre portion of the intertidal and subtidal waters in Everett and Boston where the sediment remediation will occur. See Figure 1-6, Off-Site Improvements for the location of the Remediation Area in the City of Boston. A detailed description of the sediment remediation components is provided in Chapters 2.0, Regulatory Requirements for Sediment Remediation, 3.0, Existing Conditions in the Sediment Remediation Area, and 4.0, Sediment Remediation Process, Impacts and Mitigation.

#### 1.4 TRANSPORTATION

#### 1.4.1 TRIP GENERATION

This section presents the trip generation analysis for the Project, as refined (the "Refined Project"). The Proponent has established quantitative goals for both patron and employee use of alternatives to single-occupancy vehicles ("SOV"). To achieve these goals, the Proponent is committed to implementing strong Transportation Demand Management ("TDM") measures to minimize automobile usage, detailed in Section 4.16 of the FEIR and in Section 2.7 of the SFEIR. The underlying trip

generation methodology and travel mode shares are the same as in the prior MEPA Filings.

#### **Evaluation of Effect of Project Design Refinements**

The Project design refinements discussed in Section 1.3.2 have affected the outcome of the trip generation analysis. Table 1-4 identifies the Project design refinements responsible for these slight differences in the outcome of the trip generation analysis.

Table 1-4: Comparison of Project Evaluated in the SFEIR and as Refined and Evaluated in the NPC

Land Use Component <sup>1</sup>	As Evaluated in SFEIR	As Refined and Evaluated in NPC	Difference
Hotel	629 rooms	671 rooms	+42 rooms
Retail	79,455 sf	10,752 sf	-68,703 sf
Gaming	4,580 positions	4,421 positions	-159 positions

<sup>1)</sup> These components are the primary land uses affecting the trip generation analysis. Other elements of the Project (such as spa/gym facilities, restaurants, and meeting spaces) generate internal trips and are accounted for in these primary categories.

#### **Vehicle Trip Comparison**

Using the same trip generation analysis methodology documented in the FEIR and SFEIR, the number of vehicle trips generated by the Refined Project has been estimated. Table 1-4 presents those estimates for the Project evaluated in the SFEIR and the Refined Project. This trip generation analysis confirms that the Refined Project will result in decreased traffic impacts during peak hours.

As shown in Table 1-5, the peak hour decrease in estimated vehicle trips associated with decreased retail facilities and gaming positions land uses is greater than the increase in estimated vehicle trips associated with the increased number of hotel rooms. As a result, the Refined Project design generates a lower number of estimated peak hour vehicle trips: 156 fewer vehicle trips in the Friday p.m. peak hour and 336 fewer vehicle trips in the Saturday afternoon peak hour. The estimated number of both Friday and Saturday daily vehicle trips associated with the Refined Project design is also lower (2,580 fewer daily vehicle trips on Friday and 3,416 fewer daily vehicle trips on Saturday). The Proponent is not proposing any changes to its previously committed mitigation.

Table 1-5: Comparison of SFEIR Project Vehicle Trips and Project Design as Refined in NPC Vehicle Trips

	Vehicl	e Trips	Differ	ence
Time Period/ Category	Project as Evaluated in SFEIR	Project Design as Refined and Evaluated in NPC	Vehicle Trips	Percent
Friday Daily (vpd)				
Hotel	1,538	1,650	+112	
Retail	2,998	820	-2,178	
Gaming	14,754	14,244	-510	
All Shuttles and Buses <sup>1</sup>	<u>840</u>	<u>836</u>	<u>-4</u>	
Total	20,130	17,550	-2,580	-12.8%
Friday PM Peak Hour (vph)				
Hotel	82	87	+ 5	
Retail	172	48	-124	
Gaming	1,072	1,035	-37	
All Shuttles and Buses <sup>1</sup>	<u>26</u>	<u>26</u>	<u>0</u>	
Total	1,358	1,196	-156	-11.5%
Saturday Daily (vpd)				
Hotel	1,686	1,804	+ 118	
Retail	4,094	1,164	-2,930	
Gaming	17,192	16,594	-598	
All Shuttles and Buses <sup>1</sup>	<u>1,010</u>	1,004	<u>-6</u>	
Total	23,982	20,566	-3,416	-14.2%
Saturday PM Peak Hour (vph)				
Hotel	105	111	+6	
Retail	413	114	-299	
Gaming	1,232	1,189	-43	
All Shuttles and Buses <sup>1</sup>	60	60	0	10.60
Total	1,810	1,474	-336	-18.6%

<sup>1)</sup> Includes Wynn patron shuttles, Wynn employee shuttles, tour buses, and Premium Park and Ride buses. These vehicles serve riders in all land use categories.

#### **Person Trip Comparison**

A summary of the SOV and non-SOV person trip differences between the Project as evaluated in the SFEIR and the Refined Project is presented in Tables 1-6 through 1-9. The number of person trips is estimated to decrease in Friday daily, Friday p.m. peak, Saturday daily, and Saturday peak hour conditions. The Proponent has previously committed that there will be no employee shift changes during the Friday p.m. peak hour. Therefore, there will be no Friday p.m. peak hour employee trips.

Table 1-6: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in SFEIR vs. Project Design as Refined and Evaluated in NPC, Friday Daily

	Persor	n Trips	Difference	
Type of Person Trip <sup>1</sup>	Project as Evaluated in SFEIR	Project Design as Revised and Evaluated in NPC	Person Trips	Percent
SOV				
Private Automobiles	33,130	28,521	-4,609	-13.9%
Taxis	<u>3,716</u>	<u>3,269</u>	<u>-447</u>	-12.0%
Subtotal – SOV person trips	36,846	31,790	-5,056	-13.7%
Non-SOV				
Orange Line to Patron Shuttle	4,616	4,087	-529	-11.5%
Orange Line to Employee Shuttle	1,354	1,093	-261	-19.3%
Water transportation	2,992	2,616	-376	-12.6%
MBTA bus	678	547	-131	-19.3%
Tour bus	3,808	3,676	-132	-3.5%
Premium Park and Ride	1,346	1,267	-79	-5.9%
Employee neighborhood shuttle	1,354	1,093	-261	-19.3%
Walk/bike	204	164	<u>-40</u>	-19.6%
Subtotal – Non-SOV person trips	16,352	14,543	-1,809	-11.1%
Total	53,198	46,333	-6,865	-12.9%

<sup>1)</sup> Includes all patron and employee trips.

Table 1-7: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in SFEIR vs. Project Design as Refined and Evaluated in NPC, Friday p.m. Peak Hour

	Persor	n Trips	Difference	
Type of Person Trip <sup>1</sup>	Project as Evaluated in SFEIR	Project Design as Refined and Evaluated in NPC	Person Trips	Percent
SOV				
Private Automobiles	2,391	2,078	-313	-13.1%
Taxis	<u>293</u>	<u>259</u>	<u>-34</u>	<u>-11.6%</u>
Subtotal – SOV person trips	2,684	2,337	-347	-12.9%
Non-SOV				
Orange Line to Patron Shuttle	366	323	-43	-11.7%
Orange Line to Employee Shuttle	-	-	-	-
Water transportation	220	194	-26	-11.8%
MBTA bus	-	-	-	-
Tour bus	302	291	-11	-3.6%
Premium Park and Ride	91	87	-4	-4.4%
Employee neighborhood shuttle	-	-	-	-
Walk/bike		_		-
Subtotal – Non-SOV person trips	979	895	-84	-8.6%
Total	3,663	3,232	-431	-11.8%

<sup>1)</sup> Includes all patron and employee trips.

Table 1-8: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in SFEIR vs. Project Design as Refined and Evaluated in NPC, Saturday Daily

	Persor	n Trips	Difference	
Type of Person Trip <sup>1</sup>	Project as Evaluated in SFEIR	Project Design as Refined and Evaluated in NPC	Person Trips	Percent
SOV	-			
Private Automobiles	39,514	33,425	-6,089	-15.4%
Taxis	<u>4,416</u>	<u>3,829</u>	<u>-587</u>	<u>-13.3%</u>
Subtotal – SOV person trips	43,930	37,254	-6,676	-15.2%
Non-SOV				
Orange Line to Patron Shuttle	5,520	4,787	-733	-13.3%
Orange Line to Employee Shuttle	1,628	1,275	-353	-21.7%
Water transportation	3,556	3,063	-493	-13.9%
MBTA bus	814	637	-1 <i>77</i>	-21.7%
Tour bus	4,436	4,283	-153	-3.4%
Premium Park and Ride	1,576	1,476	-100	-6.3%
Employee neighborhood shuttle	1,628	1,275	-353	-21.7%
Walk/bike	244	<u>191</u>	<u>-53</u>	<u>-21.7%</u>
Subtotal – Non-SOV person trips	19,402	16,987	-2,415	-12.4%
Total	63,332	54,241	-9,091	-14.4%

<sup>1)</sup> Includes all patron and employee trips.

Table 1-9: SOV and Non-SOV Person Trips by Travel Mode – Project Evaluated in SFEIR vs. Project Design as Refined and Evaluated in NPC, Saturday Afternoon Peak Hour

	Persor	Trips	Difference	
Type of Person Trip <sup>1</sup>	Project as Evaluated in SFEIR	Project Design as Refined and Evaluated in NPC	Person Trips	Percent
SOV				
Private Automobiles	3,037	2,477	-560	-18.4%
Taxis	347	299	<u>-48</u>	<u>-13.8%</u>
Subtotal – SOV person trips	3,384	2,776	-608	-18.0%
Non-SOV				
Orange Line to Patron Shuttle	433	374	-59	-13.6%
Orange Line to Employee Shuttle	94	33	-61	-64.9%
Water transportation	274	229	-45	-16.4%
MBTA bus	46	16	-30	-65.2%
Tour bus	345	333	-12	-3.5%
Premium Park and Ride	118	105	-13	-11.0%
Employee neighborhood shuttle	94	33	-61	-64.9%
Walk/bike	14	<u>5</u>	<u>-9</u>	<u>-64.3%</u>
Subtotal – Non-SOV person trips	1,418	1,128	-290	-20.5%
Total	4,802	3,904	-898	-18.7%

<sup>1)</sup> Includes all patron and employee trips

### 1.5 SIGNIFICANCE OF PROJECT CHANGES

The MEPA regulations specify the factors which the Secretary may consider in determining whether changes to a project are significant. These factors include:

i. An expansion in the physical dimensions of a project of 10% or more:

The footprint of the building is unchanged. The total square footage has increased by 6%.

#### ii. An increase in the level of impacts previously reviewed of 25% or more:

The level of impacts has overall declined. The Project program adjustments result in fewer vehicle trips, both average and peak hour, on Fridays and Saturdays. These reductions range from a low of 12.4% to a high of 19.2%. Water use and wastewater generation changes have been identified in this NPC. Impacts associated with the sediment remediation had not been identified in the MEPA Filings and are described in detail in this NPC.

iii. Meeting or exceeding any review threshold that was not previously met or exceeded:

Additional review thresholds have not been exceeded.

iv. A change in the expected date for commencement of the project or construction, completion date, or schedule:

The Project has commenced construction and is on-schedule.

v. A change of the project site:

The Project Site has not changed. The total area of sediment remediation and some off-site activities have been identified in this NPC.

vi. A new application for a permit or new request for financial assistance or land transfer:

New applications for permits to complete the sediment remediation have been identified in this NPC, and impacts have been addressed.

vii. For a project with net benefits to the environment, any change that prevents or delays realization of such benefits:

There are many net benefits to the environment as a result of the Project. The changes will not delay the delivery of these benefits.

As described in Sections 1.1 through 1.4, changes to the Project as described in the MEPA Filings are deminimus, and those changes, with the exception of the sediment remediation, will be addressed through current permits or with minor modifications or amendments to existing permits. The sediment remediation will require new permits and approvals as further described in Sections 1.7 and Chapter 2.0 Regulatory Requirements for Sediment Remediation.

#### 1.6 COMPLIANCE WITH CHAPTER 91

# 1.6.1 PUBLIC BENEFIT DETERMINATION OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS

On September 25, 2015, the Secretary issued a Public Benefit Determination (the "Determination") providing that the Project will have a public benefit. This Determination acknowledged the completion of the MEPA process and the requirements for the Project to proceed with state and local permitting. The Proponent has received, or is in the process of obtaining all permits and approvals as identified in the MEPA Filings and in the Determination. Modifications to the Project as described in this NPC will not affect the status or validity of the Determination.

#### 1.6.2 EXISTING CHAPTER 91 LICENSE

The Proponent received a Chapter 91 License for the Project on August 3, 2016. This license was recorded in the Registry of Deeds for Middlesex County. The Proponent has addressed or will address the Project refinements as described in Section 1.3 through one or more minor project modifications to the existing Chapter 91 License. The Proponent received approval of the change in the garage layout as a Minor Project Modification on February 28, 2017.

#### 1.6.3 NEW PERMIT OR LICENSE FOR SEDIMENT REMEDIATION

The sediment remediation work will be approved through a new Chapter 91 Permit or License. This permit or license will allow the dredge and cap activities as described in Chapter 4.0, Sediment Remediation Process, Impacts and Mitigation.

#### 1.6.4 OFF-SITE IMPROVEMENTS

As was identified in the MEPA Filings, the DCR Harborwalk Connector will require a Chapter 91 License for a water-dependent use. The pedestrian and landscape enhancements described in Section 1.3.4 are expected to be approved with either a minor project modification to the Project Chapter 91 License or a new Chapter 91 License.

#### 1.7 STATUS OF REQUIRED PERMITS AND AUTHORIZATIONS

The majority of permits identified in the MEPA Filings have already been obtained by the Proponent. See Table 1-10 for a list of Permits required for the Project. New permits required to support the sediment remediation are included in this table.

Table 1-10. Required Permits and Authorizations

Agency	Permit, Review, or Approval as Identified in MEPA Filings	Permit Received	Permit, Review, or Approval for Sediment Remediation
Federal			
Federal Aviation Administration	Determination of No Hazard (DNH) or other Determination regarding Air Navigation	V	N/A
	o Building		
	<ul> <li>Construction</li> <li>Crane</li> </ul>		

Agency	Permit, Review, or Approval as Identified in MEPA Filings	Permit Received	Permit, Review, or Approval for Sediment Remediation
US Army Corps of Engineers (USACE)	Work in Navigable     Waters (Section 10)     Permit	V	Massachusetts General Permit 17
	<ul> <li>Clean Water Act (Section 404) Individual Permit</li> </ul>	1	
US Environmental Protection Agency (EPA)	<ul> <li>National Pollutant         Discharge Elimination         System (NPDES)         Construction General         Permit (CGP) NOI (for stormwater         management)         </li> <li>On-site</li> </ul>	<b>\</b>	N/A
	o Off-site		
	NPDES Remediation     General Permit (RGP)(for construction dewatering)	V	
State			
Executive Office of Energy and Environmental	Massachusetts     Environmental Policy     Act (MEPA) Review	1	NPC
Affairs (EOEEA)	Municipal Harbor Plan     Approval	V	
Massachusetts Department of Environmental	Chapter 91 Waterways     License	<b>V</b>	Chapter 91 Waterways Permit or License
Protection (MassDEP)	Notification of     Construction and     Demolition	√	Water Quality Certification Wetlands Superseding
	Plan Approval or ERP     Certification for     stationary source		Order of Conditions (only if local order is appealed)
	Water Quality     Certification (401)	V	
	<ul> <li>Wetlands Superseding         Order of Conditions         (only if local order is appealed)     </li> </ul>	N/A	

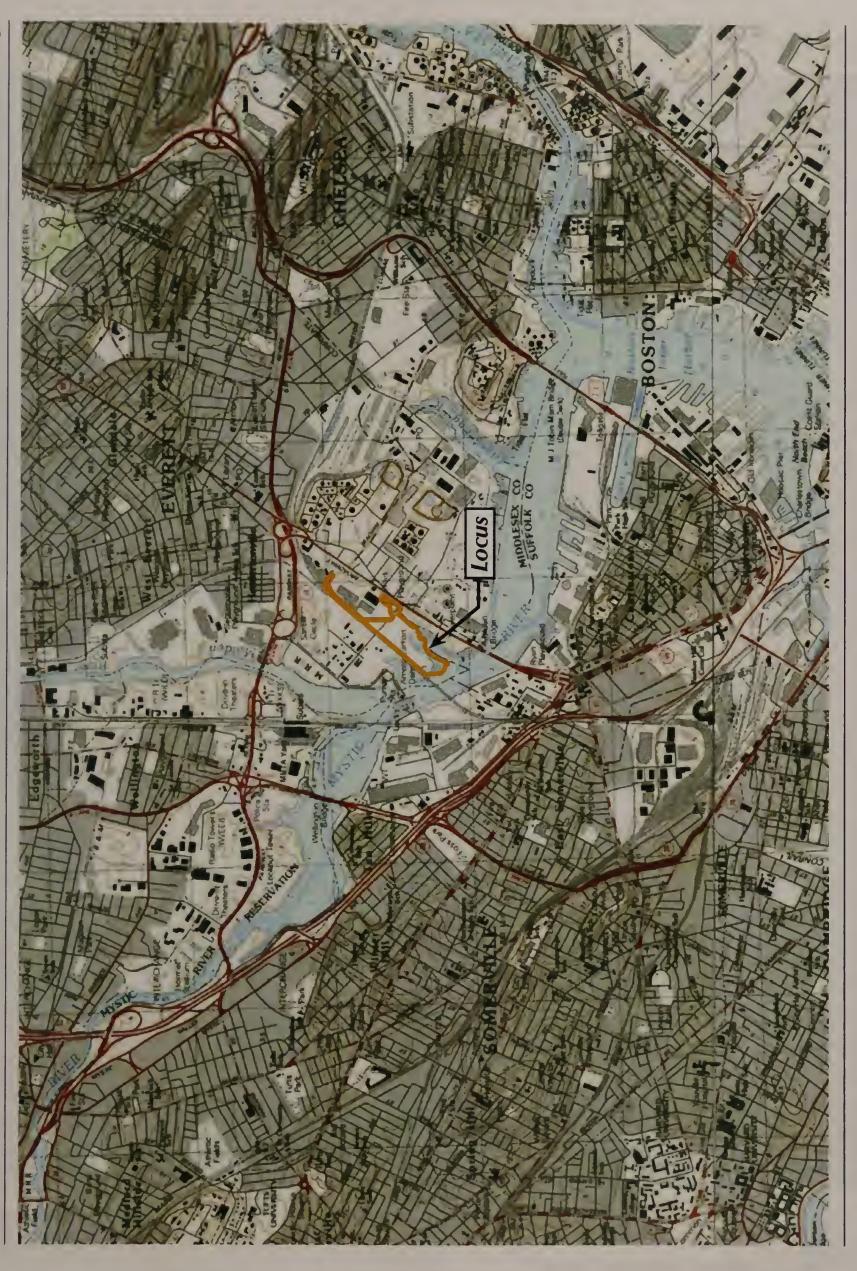
Agency	Permit, Review, or Approval as Identified in MEPA Filings	Permit Received	Permit, Review, or Approval for Sediment Remediation
Massachusetts Office of Coastal Zone Management (CZM)	Federal Consistency     Review	1	Consultation required
Massachusetts Historical Commission (MHC)	Review of Project     relative to potential     effects on State Register     of     historical/archaeological     resources	1	N/A
Board of Underwater Archaeological Resources (BUAR)	Review of proposed work and Project Site to determine if Reconnaissance Excavation or Special Use Permit(s) are necessary	1	Review of proposed work and Project Site to determine if Reconnaissance Excavation or Special Use Permit(s) are necessary
Massachusetts Department of Conservation and Recreation (DCR)	<ul> <li>Access Permit for work on and/or access to DCR Park Lands and Roadways</li> </ul>		N/A
Massachusetts Department of Transportation (MassDOT)	<ul> <li>MBTA Land Disposition and Easements Agreements</li> </ul>	1	N/A
	<ul> <li>Non-Vehicular Access         Permit         Off-site roadway         improvements     </li> </ul>		
MassDOT Aeronautics Division	Airspace Review	√	N/A
Massachusetts Department of Housing and Community Development	Approval of Urban     Renewal Plan	V	N/A
Massachusetts Gaming Commission	Category 1 Gaming     License	√ 	N/A

Agency	Permit, Review, or Approval as Identified in MEPA Filings	Permit Received	Permit, Review, or Approval for Sediment Remediation	
	Alcohol License			
Massachusetts Water Resources Authority (MWRA)	8M Permit		N/A	
Massachusetts Port Authority (Massport)	License to work in a roadway		N/A	
Local				
City of Boston Public Improvements Commission (PIC)	Approval for off-site roadway improvements		N/A	
City of Boston Transportation Department (BTD)	Approval for off-site roadway improvements		N/A	
Boston Conservation Commission	• N/A	N/A	Order of Conditions	
Everett Planning	Site Plan Review	V	N/A	
Board	Urban Renewal Plan	V		
Everett Conservation Commission	<ul><li>Order of Conditions</li><li>On-site</li></ul>	<b>V</b>	Order of Conditions	
	o Off-site			
Everett Fire	Review of Plans	√	N/A	
Department	Fire Suppression System     Installation			
	Fuel Storage Permit			
	LP Gas Storage Permit			
	Underground Storage     Tank Removal Permit     (Commercial)			
Everett Health Department	Food Establishment     Permit Application		N/A	
Everett Licensing Commission	Common Victualler     License		N/A	

Agency	Permit, Review, or Approval as Identified in MEPA Filings	Permit Received	Permit, Review, or Approval for Sediment Remediation	
Everett Public Works	Sewer Connection     Permit		N/A	
	Water Connection     Permit			
	Off-site Roadway     Improvements			

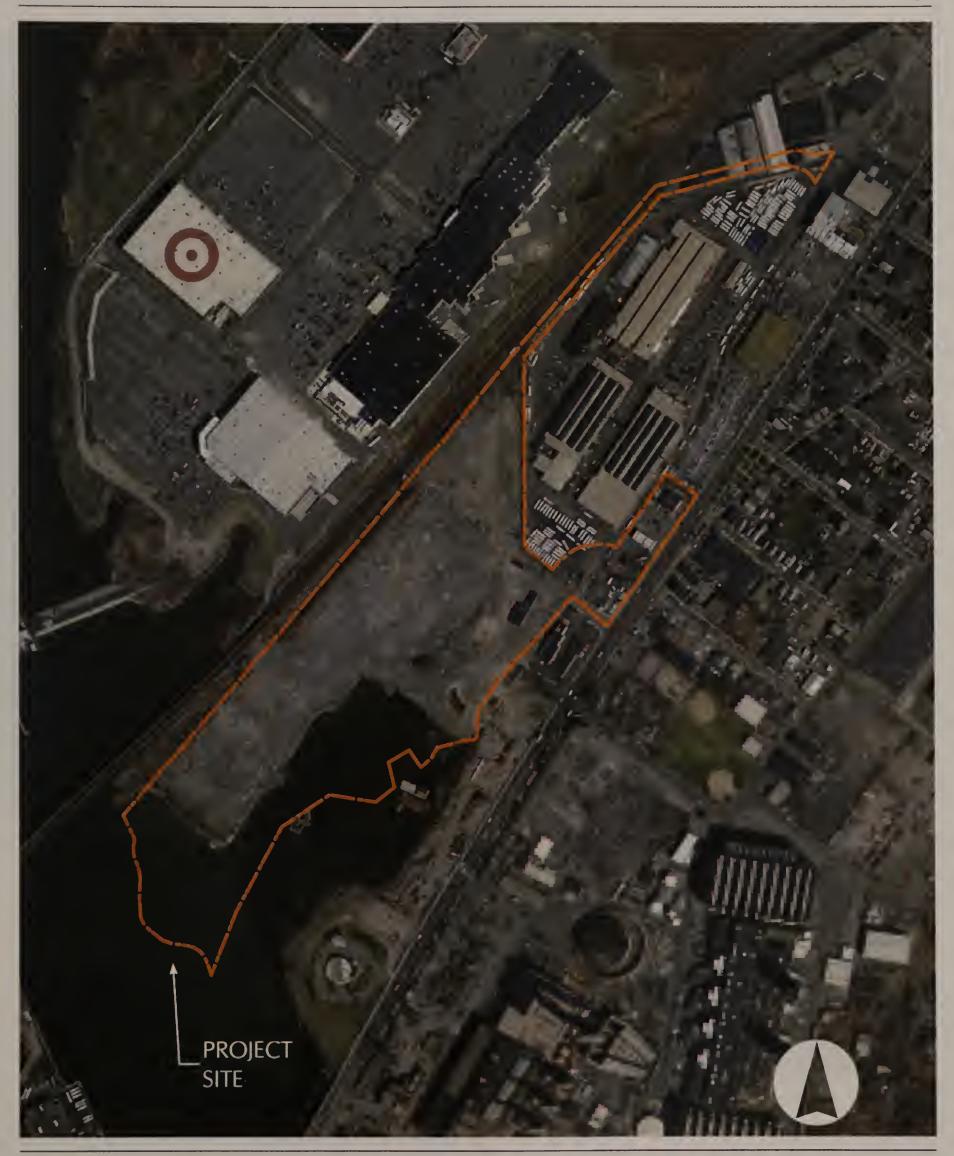
#### 1.8 PROJECT TEAM

Proponent	Wynn MA, LLC	
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	Contact: Judith T. Kohn	
	jkohn@fpa-inc.com	
Sediment Remediation	AMEC Massachusetts Inc.	
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	Chelmsford, MA 01824	
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Shoreline	GZA GeoEnvironmental	
Engineer/Landside  Remodiation Engineer and	249 Vanderbilt Ave.	
Remediation Engineer and LSP	Norwood, MA 02062	
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Wynn Boston Harbor Everett, Massachusetts





Wynn Boston Harbor Everett, Massachusetts

Figure 1-2

Locus Aerial

Source: Google Earth, Fort Point Associates, Inc. 2017



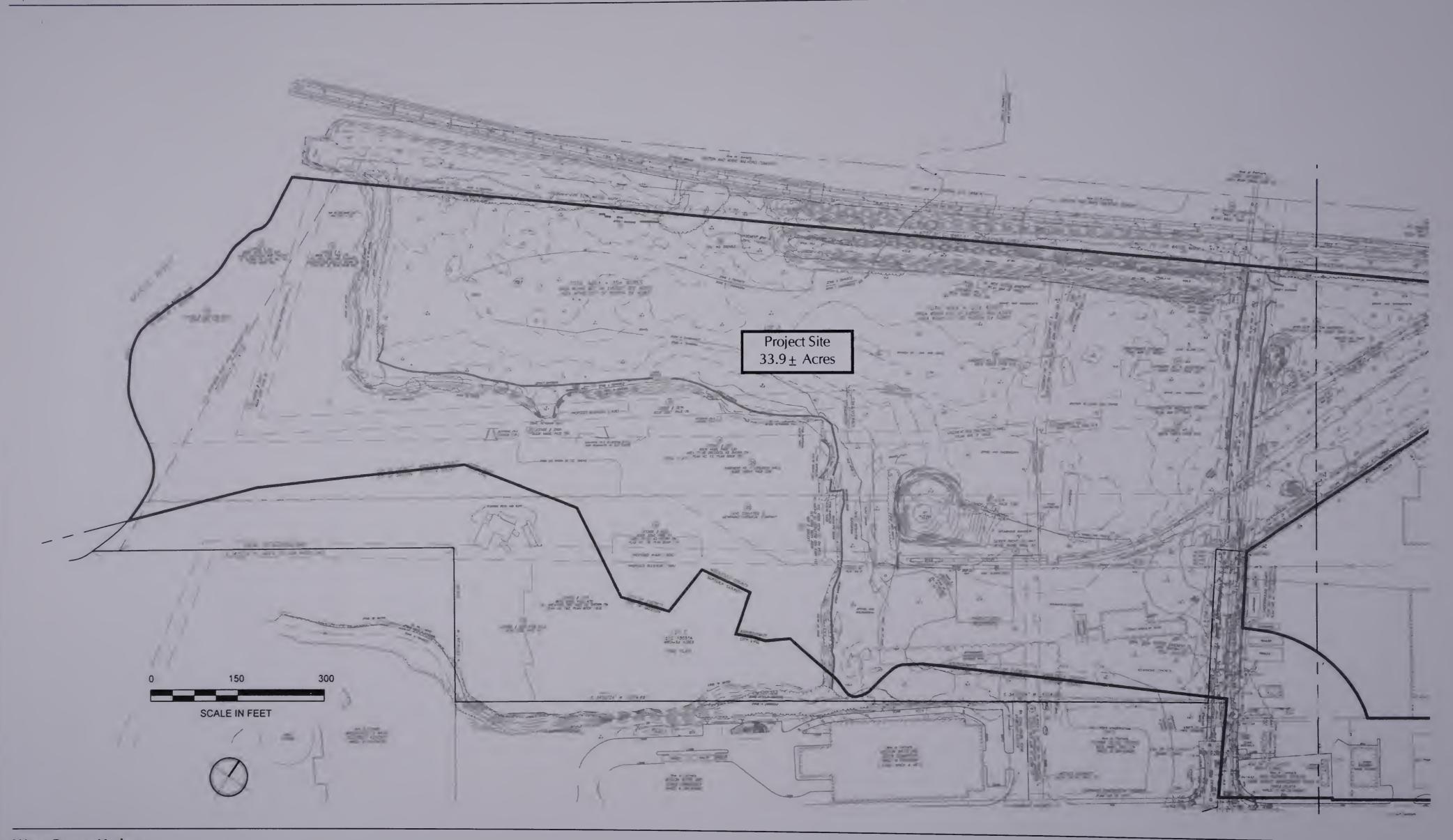


Wynn Boston Harbor Everett, Massachusetts

Figure 1-3

SSFEIR Site Plan
Source: Lifescapes International, Inc. 2015



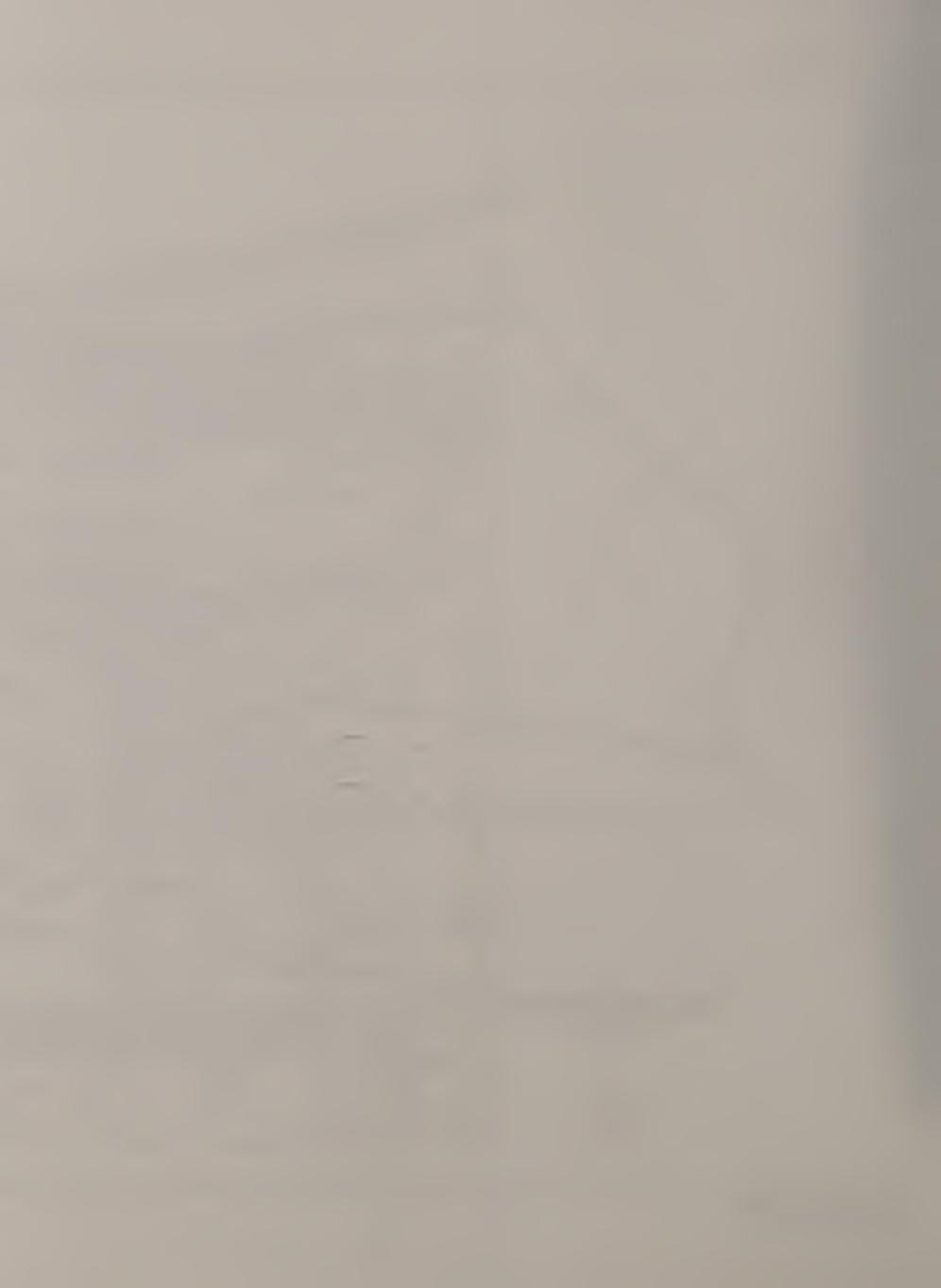


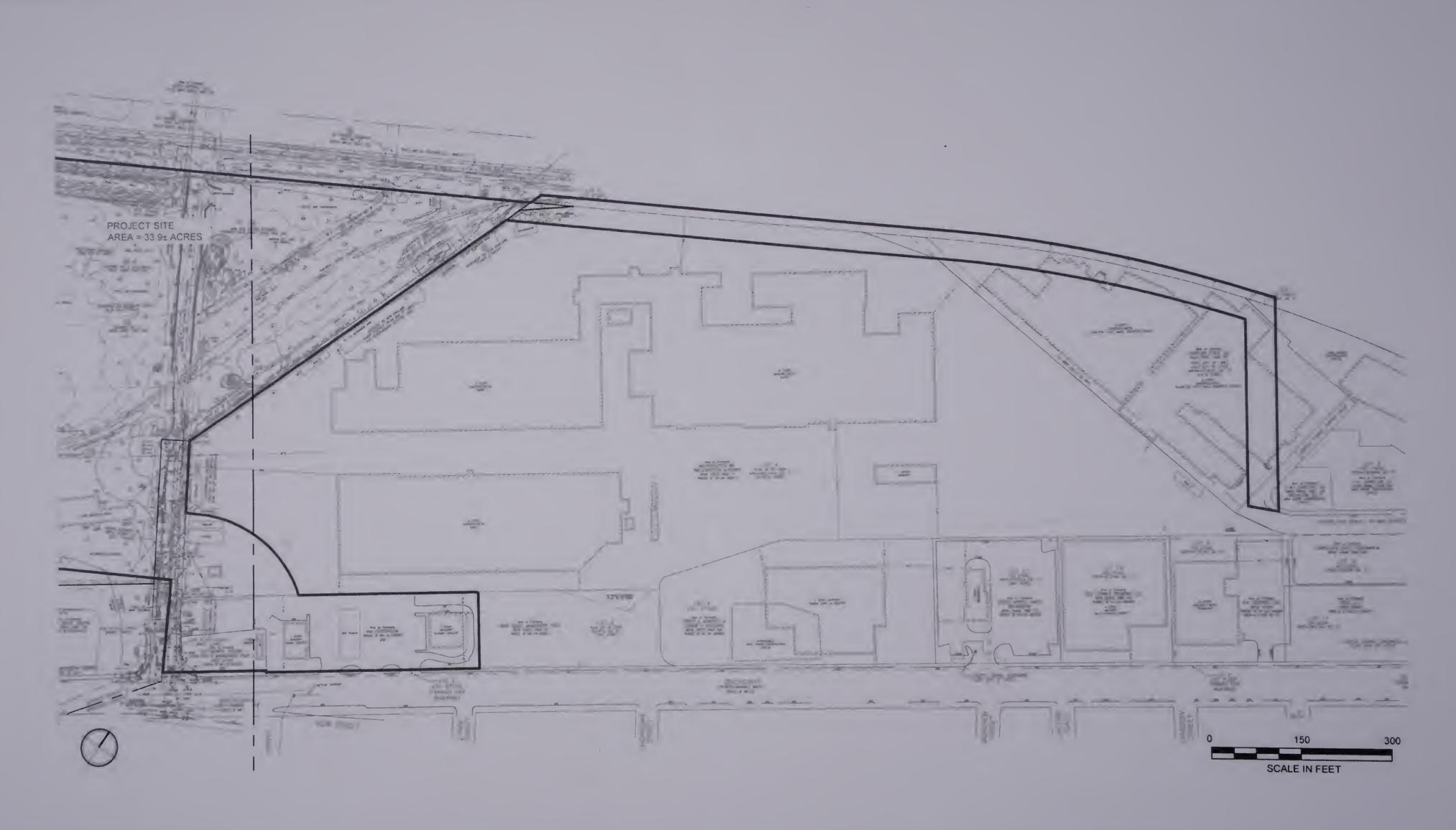
Wynn Boston Harbor Everett, Massachusetts

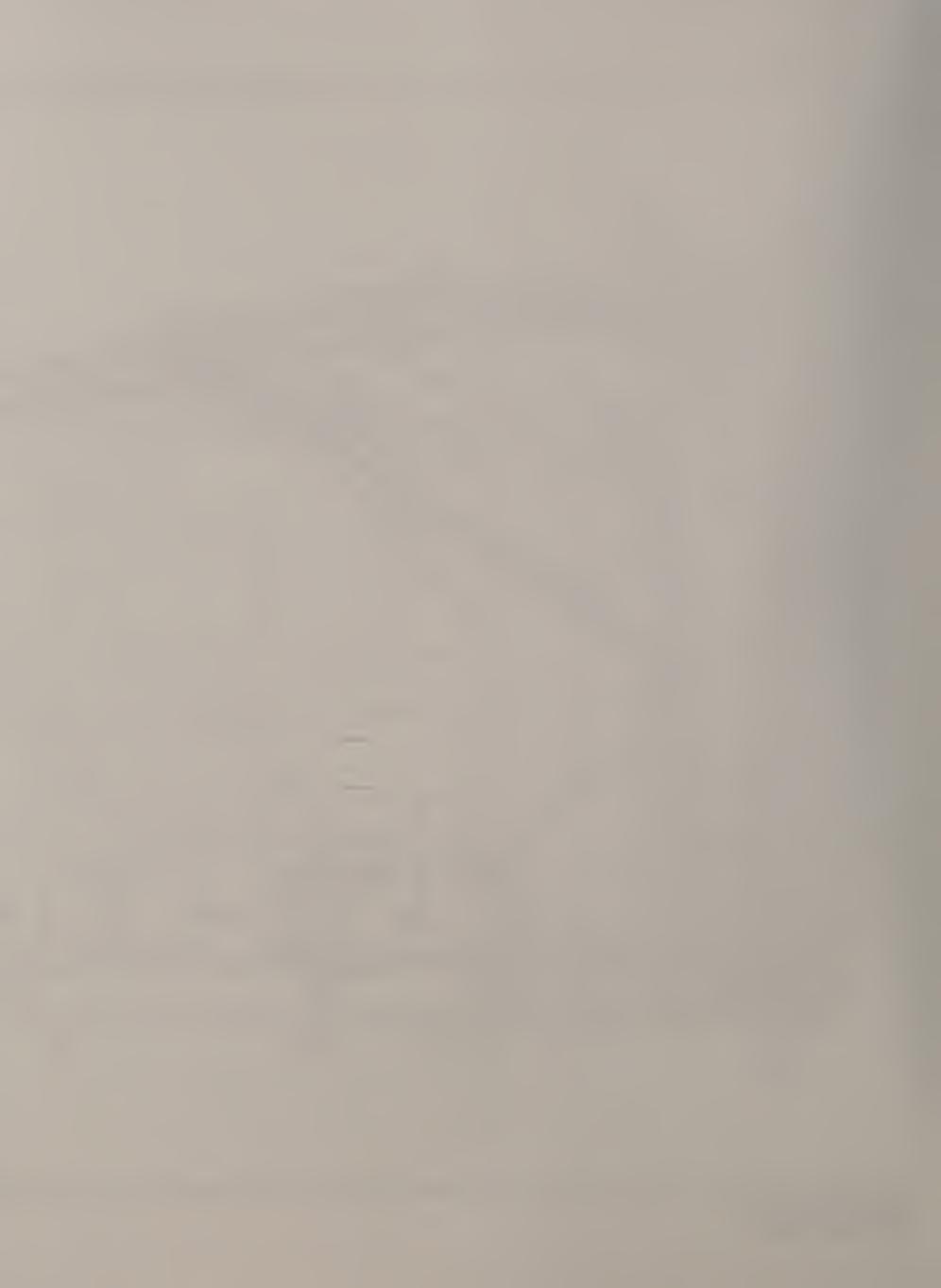
Figure 1-4

Project Site (1 of 2)

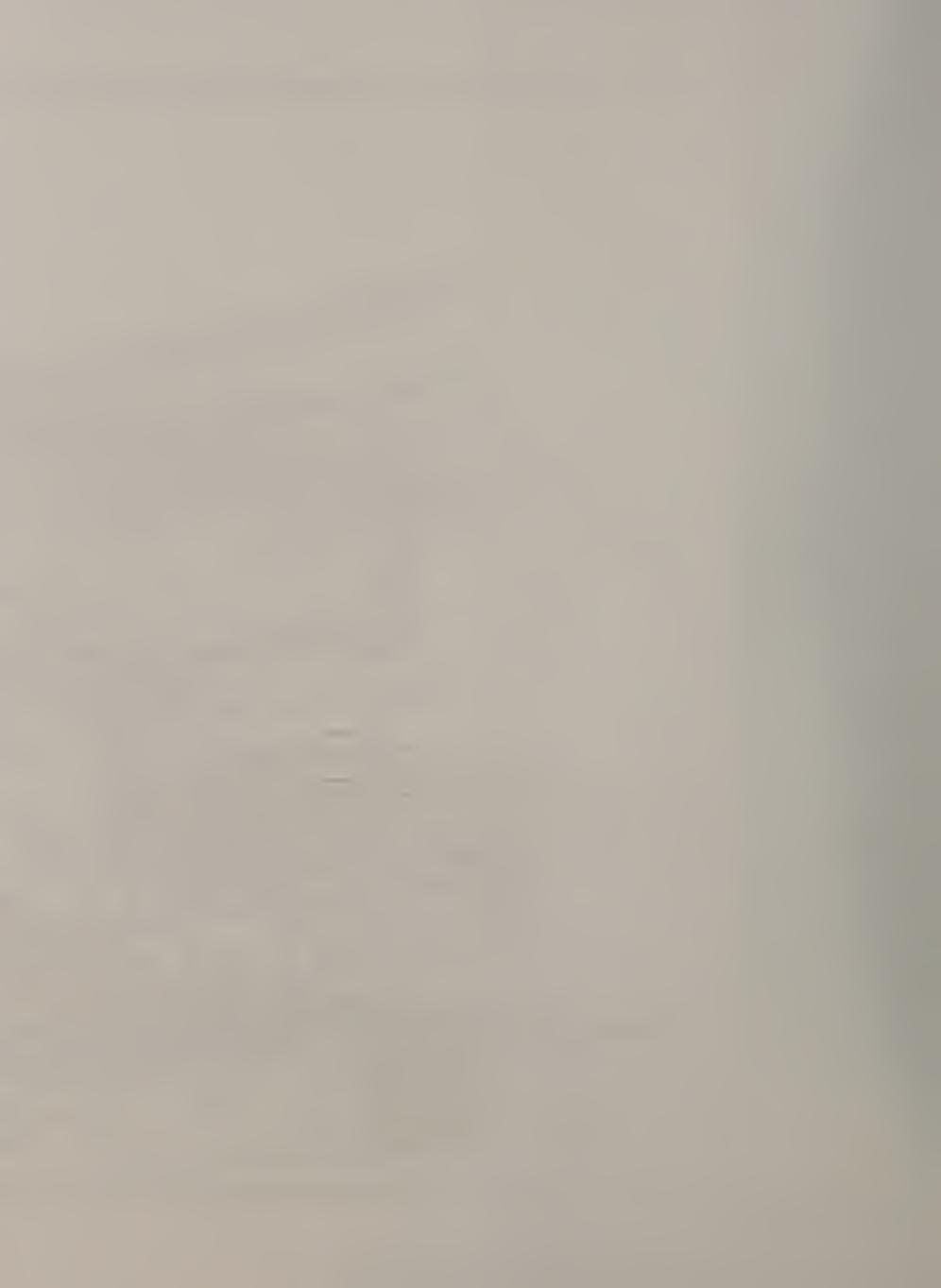
Source: Feldman Professional Land Surveyors, 2013











## Chapter 2

# REGULATORY REQUIREMENTS FOR SEDIMENT REMEDIATION



# CHAPTER 2: REGULATORY REQUIREMENTS FOR SEDIMENT REMEDIATION

#### 2.1 MCP REGULATORY FRAMEWORK

The Proponent acquired the Project Site on January 2, 2015. On February 5, 2015, the Proponent filed an Eligible Person Submittal and a Revised Tier II Classification with MassDEP for RTN 3-13341 to re-establish response action deadlines in accordance with 310 CMR 40.0570. This document included a "Supplemental Sampling and Analysis Plan" outlining an extensive sampling program to refine the Disposal Site boundary. In response to the Eligible Person Submittal, MassDEP issued a Notice of Responsibility ("NOR") and Establishment of Interim Deadlines for the Disposal Site to the Proponent on February 24, 2015.

In December 2015, a Supplemental Phase II Report which contained the results from the sediment sampling program as well as an updated Disposal Site boundary and risk characterization was submitted to MassDEP in accordance with the Interim Deadline in the NOR. In May 2016, MassDEP issued a letter containing questions they had about the Supplemental Phase II Report and requesting additional assessment and/or data review. This letter also established new interim deadlines for submittal of a Revised Phase II Report, Phase III, and Phase IV reports, and a Permanent or Temporary Solution or Remedy Operation Status.

In September 2016, the Proponent proposed an alternative approach to characterizing the Disposal Site and supplied additional information requested by MassDEP. Ongoing discussions occurred with MassDEP. On December 30, 2016, the Proponent submitted a Revised Phase II Report which responded to MassDEP's comments and provided an alternate approach to site assessment and closure. The Proponent is in the process of preparing Phase III and Phase IV reports.

Further, on April 8, 2015, the Proponent received a petition from residents of the City of Everett requesting that the Disposal Site be designated as a Public Involvement Plan ("PIP") site in accordance with the MCP. The Disposal Site was designated as PIP site on April 28, 2015. The current PIP was submitted to MassDEP on May 2, 2016.

The purpose of a PIP is to provide opportunities for public involvement throughout the MCP process. The plan establishes protocols for the creation of local information repositories, establishment of a mailing list, notifications to public officials and local residents, and public comment periods and public meetings for major MCP submittals.

In accordance with the PIP and the MCP, the Proponent notified the site mailing list and public officials of the availability of the Revised Phase II Report. As the findings and conclusions of the Revised Phase II Report are not significantly different than the previously submitted Phase II Report, a comment period was not required. Copies of the Revised Phase II Report were also made available at the designated information repositories and online through the MassDEP site file viewer and the Proponent's website.

The draft combined Phase III Remedial Action Plan and Phase IV Remedy Implementation Plan will be made available for public comment. A copy of the draft report will be provided to the information repositories and a notice of availability will be sent to the site mailing list. The public comment period is anticipated to be 20 calendar days unless the public requests an extension. A public meeting will also be held to present the proposed remedy and solicit public comment.

The Proponent will prepare a summary of all comments received and responses to those comments. A copy of this response summary will be sent to all those who submitted comments, and copies will also be placed in the information repositories and the MassDEP site file. The Proponent will also send a notice of availability of the response summary to the mailing list. The final combined Phase III and Phase IV report will then be submitted to MassDEP, the site mailing list and public officials will be notified, and copies of the report will be made available through the information repositories and the Proponent's website.

#### 2.2 REQUIRED PERMITS AND AUTHORIZATIONS

Due to the proposed remediation work taking place in jurisdictional resources, several environmental permits and reviews in addition to the MCP process will be required to conduct the sediment remediation, as listed below:

#### **Federal**

- Section 404 Clean Water Act and Section 10 Rivers and Harbor Act approval Army Corps of Engineers (ACOE) General Permit 17
- Section 106 Consultation (both Federal and State)

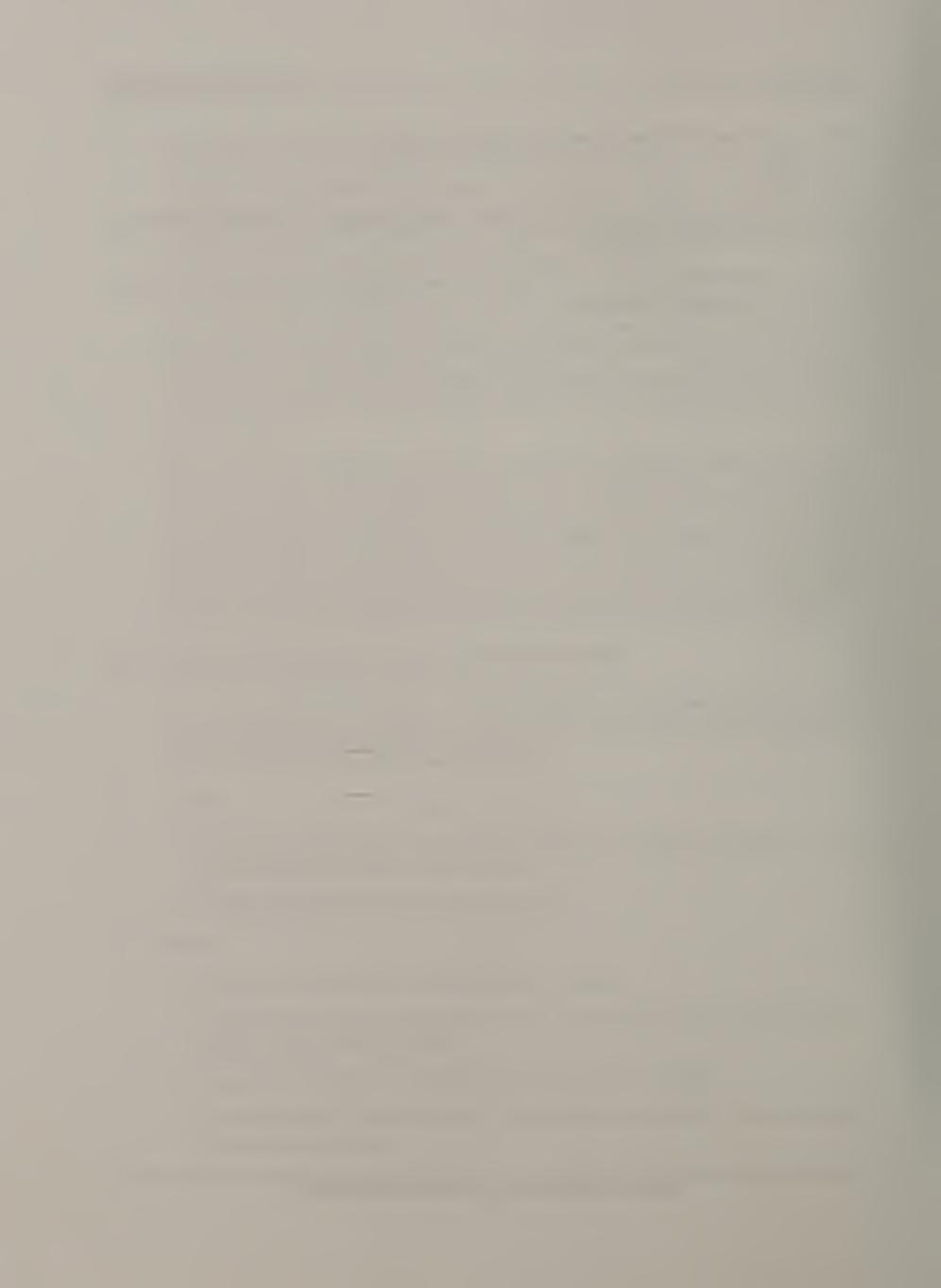
#### State

- Massachusetts Contingency Plan Compliance MassDEP
- Massachusetts Environmental Policy Act Executive Office of Energy & Environmental Affairs - Notice of Project Change
- Section 401 Clean Water Act Water Quality Certification MassDEP
- MassDEP Federal Consistency Review As administered by the MA Office of Coastal Zone Management (CZM)

Chapter 91 Waterways Permit or License– MassDEP

#### Local

- MA Wetlands Protection Act Notice of Intent Application (as administered by Everett Conservation Commission)
- MA Wetlands Protection Act Notice of Intent Application (as administered by Boston Conservation Commission)



Chapter 3

# EXISTING CONDITIONS IN THE SEDIMENT REMEDIATION AREA



# CHAPTER 3: EXISTING CONDITIONS IN THE SEDIMENT REMEDIATION AREA

The regulatory driver for the sediment remediation is the MCP, which requires that Response Actions be conducted until a Permanent or Temporary Solution is achieved at a Disposal Site¹ within the Commonwealth. The Disposal Site, identified by MassDEP as RTN 3-13341, includes the entire upland portion of the property in Everett, and a portion of Mystic River below MHW in both Everett and Boston. The Mystic River sediment portion of the Disposal Site encompasses 7.8 ± acres. The Remediation Area, which is a portion of the Disposal Site as shown on Figure 3-1 (Existing Conditions and Coastal Resource Areas) encompasses 7.0 ± acres. The Remediation Area includes 4.5 ± acres in the City of Everett and 2.5 ± acres in the City of Boston. See Figure 3-1, Existing Conditions and Coastal Resource Areas.

#### 3.1 PHYSICAL SETTING

#### 3.1.1 LOCATION

otherwise disposing of such oil and/or hazardous material."

The Remediation Area is located in the lower reaches of the Mystic River, 1,000 feet downgradient of the Amelia Earhart Dam and approximately 8,400 feet upstream of where the Mystic River empties into Inner Boston Harbor. The Chelsea River joins with the Mystic River approximately 8,000 feet downgradient of the Project Site. The estuarine waters at the Project Site have a mean tidal range of approximately 9.5 feet. In general, the Boston Inner Harbor and the lower Mystic River area are well-flushed by both strong tidal currents and freshwater flow.

The Remediation Area lies primarily within an embayment of the Mystic River (the "Embayment"), with one portion extending into a shallow portion of the Mystic River channel. The embayment ranges in width from approximately 350 to 500 feet from shoreline to shoreline with expansive areas of tidal flats on the easterly side. The 7.0  $\pm$  acre area of sediment remediation fronts on approximately 1,890 linear feet of shoreline. The tidal flats on the easterly side of the Project Site are bounded by coastal bank to the east and southeast. The majority of the coastal bank in this area, which

<sup>&</sup>lt;sup>1</sup> Per 310 CMR 40.0006, the term "Disposal Site" means "any structure, well, pit, pond, lagoon, impoundment, ditch, landfill or other place or area, excluding ambient air or surface water, where uncontrolled oil and/or hazardous material has come to be located as a result of any spilling, leaking, pouring, abandoning, emitting, emptying, discharging, injecting, escaping, leaching, dumping, discarding or

is riprap lined, is owned by the Boston Water and Sewer Commission and the Massachusetts Water Resources Authority (MWRA).

#### 3.1.2 **DEPTH**

The embayment contains a former navigation channel which was reportedly first constructed in the late 1800s, further modified between the early 1900s and 1940s during the development of the Disposal Site, and likely last dredged in the 1950s. Records indicate the channel to be about 1,100 feet long with a width of 100 feet, and an original draft of 18 to 25 feet below Mean Low Water (MLW). The channel flares out at the northern end to about 250 feet wide.

Since its last maintenance dredging, the channel has been shoaled by accumulated sediment, and the present depth does not exceed approximately 13 feet below the MLW mark. The more typical channel bottom in the embayment is 11 feet below MLW, while the channel is 8 feet deep below MLW at the upper end of the embayment. The eastern side of the embayment is a mudflat; the higher portions of the mudflat are about 3 feet above MLW. Just south of the Project Site, south of where the embayment and river join, the Mystic River is approximately 20 feet deep below MLW within the existing main channel.

#### 3.1.3 STRUCTURES

The embayment fronts on a previously developed waterfront in disrepair, with rubble and debris-filled slopes and dilapidated timber and pile-supported stone bulkhead walls supporting adjacent upland areas. The shallower portions of the shoreline also contain debris and remnants of timber structures, abandoned wooden barges, and a mix of shoreline vegetation including invasive species. Demolition of the bulkheads and cleanup of the shoreline is currently underway and is anticipated to be complete prior to the start of sediment remediation. Much of the upland portion of the Disposal Site consists of hydraulic fill placed on areas of former salt marsh about a century ago during the industrial development of the Disposal Site. Portions of the sloped shoreline within the embayment are comprised of small stones and debris. The inner embayment and mudflat area within which the Remediation Area is situated also contain a variety of debris which has been deposited over many years.

Within the northern portion of the embayment are some abandoned timber and pile-supported stone walls that abut the channel and which were used for historic loading/unloading operations. Several abandoned timber dock structures located adjacent to the north-central portion of the channel were used during the early 1990s when Deer Island Outfall tunnel muck was being disposed of on the upland portion of the Project Site. Four abandoned timber barges are mired in the eastern intertidal portion of the inner embayment, and one is sunken in the head of the embayment;

all are in significant disrepair. In addition, an 18-inch-diameter outfall pipe that collects stormwater from Alford Street extends through the Boston Water and Sewer property and discharges into the tidal flats of the Remediation Area. New marine structures, including bulkheads, and new and relocated outfalls are currently under construction on the Project Site.

#### 3.1.4 SEDIMENT CHARACTERISTICS

Sediments within the intertidal and subtidal components of the Remediation Area are of three major types:

- muddy substrates within the embayment with a low percentage of rocks and shells;
- muddy substrates with higher percentages of shell fragments and rocks occurring in a transitional area closer to the Mystic River; and
- bottom sediments within or immediately proximal to the Mystic River channel, characterized by more sediments with higher percentages of small rocks and spent shells.

The determinate factor affecting the type and distribution of the sediments appears to be the flow conditions and tidal action, where increased flow rates associated with the river and channel have coarser sediments and the slack water areas in the embayment have finer sediment materials. Grain size analyses conducted on the embayment samples indicated that sediment consists of organic silts with approximately 20 to 35 percent fine sands. Sediment contamination and analysis is discussed in the "Revised Supplemental Phase II Comprehensive Site Assessment Report, Sediments Adjacent to the Former Everett Staging Yard, 1 Horizon Way, Everett Massachusetts, Release Tracking Number (RTN) 3-13341," which was submitted to MassDEP in December 2016 (the "Revised Phase II Report"). This report is available via electronic link from the Wynn Boston Harbor website: http://www.wynnbostonharbor.com/news/public-documents/.

#### 3.1.5 WATER QUALITY

Under the Massachusetts Surface Water Quality Standards (Massachusetts Administrative Code 314 CMR 4.00), coastal and marine waters are classified as Class SA, Class SB or Class SC. The Commonwealth of Massachusetts classifies the Lower Mystic River as Class SB water, which is designated as habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary recreation. Due to high bacterial counts, the area is closed to shellfish harvesting. This portion of the Mystic River is also under a fish consumption advisory due to the presence of polychlorinated biphenyls (PCBs),

chlordane, and dichloro-diphenyl-trichloroethane (DDT). MWRA water quality monitoring results from the two stations closest to the Remediation Area (Station 52, about 3,000 feet downstream, and Station 69, about 1,000 feet upstream) are indicative of a shallow estuarine habitat, where salinity and temperature would be expected to fluctuate over a wide range; salinity in this reach of the river was observed to fluctuate from nearly freshwater to ocean-concentration salt water. Mean salinity values indicate that the area is highly saline most of the time. Turbidity was generally relatively low, around 5 nephelometric turbidity units (NTU), although there were some readings over 50 NTU.

### 3.2 MARINE ENVIRONMENT: INTERTIDAL & SUBSURFACE CONDITIONS

The Mystic River embayment, including the Remediation Area, was assessed for various aquatic biological resources that might be present in this type of marine setting, and which could affect the sediment remediation design and/or implementation. Resources evaluated included Submerged Aquatic Vegetation ("SAV"), shellfish habitat, Essential Fish Habitat ("EFH"), and federally threatened and endangered species ("T&E species").

The understanding of any such potential habitats and species within the remediation area is a critical element of successful project design, permitting and implementation. Some of the biological resources are relevant to mitigation at the state level (SAV, T&E and shellfish), and EFH and T&E species typically require consultation at the federal level.

In general, the subsurface investigations largely confirmed earlier observations, showing a general lack of SAV, and limited (but present) shellfish resources. There are no T&E species habitats within or affected by the sediment remediation activities. While EFH is noted as present, there are no Habitat Areas of Particular Concern ("HAPC") within this area. Intertidal habitats in the embayment within Boston and Everett, are highly modified from their original conditions, with extensive historical alterations to the Coastal Beach and much of the shoreline armored with manmade structures. Because of these modifications, the remaining coastal and intertidal substrates in the embayment are limited to patches of sand associated with beaches and patches of mud accompanying remnant tidal flats and salt marsh, which only occur on the southwest portion of the embayment outside the Remediation Area. The benthic zones (seafloor) of the embayment were confirmed to be primarily unconsolidated. soft mud (silt) over an essentially flat harbor bottom, with the fine grain size of the sediment typically indicative of low current and wave activity in the area. Benthic habitat for shellfish in the embayment is considered degraded due to chemical contamination and oxygen-poor sediments. A detailed summary of the findings of the EFH and Shellfish Evaluation will be provided during the sediment remediation permitting process.

## 3.3 COASTAL RESOURCE AREAS (MASSACHUSETTS) WITHIN THE PROJECT SITE

The 7.0  $\pm$  acres comprising the Remediation Area include four coastal resource areas as defined under the MA Wetlands Protection Act (WPA) and its implementing Regulations (310 CMR 10.21 through 10.37):

- Land Under the Ocean;
- Coastal Beach and Tidal Flats;
- Land Containing Shellfish; and
- Salt Marsh.

The resource areas within the Remediation Area are depicted on Figure 3-1, Existing Conditions and Coastal Resource Areas. In addition, outside the Remediation Area, and within the landside jurisdictional areas, the Buffer Zone overlaps with and includes the Riverfront Area and Land Subject to Coastal Storm Flowage, and supports vegetation typical of disturbed sites. The locations of the resource areas within the Everett City limits were previously identified in the Notice of Intent submitted to, and the Order of Conditions issued by, the Everett Conservation Commission (MassDEP File No. 022-0095, November 20, 2014) as part of the Commission's approval of activities to be undertaken by the Proponent under the MCP to address some of the Disposal Site's historic contamination. Resource areas were also included in the Request for Determination of Applicability ("RDA") filing that was submitted to the Boston Conservation Commission in October 2014 to conduct environmental sampling on the Boston portion of the Disposal Site. This resulted in a Negative Determination.

According to the 2008 MassGIS Natural Heritage and Endangered Species Program ("NHESP") data layers, there are no areas identified as Priority or Estimated Habitat for rare species in the Remediation Area. Since the entire Remediation Area is located within the marine environment, there are no Certified Vernal Pools or Potential Vernal Pools present.

Regulated wetland resource areas on and adjacent to the Remediation Area are shown on Figure 3-1 and are described in the following sections.

#### 3.3.1 LAND UNDER THE OCEAN

Land Under the Ocean is defined in 310 CMR 10.25(2) as:

Land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries.

The Remediation Area is located within a tidal reach of the Mystic River below MLW, which is identified as elevation -5.21 feet NAVD88 at the Project Site and immediately abuts upgradient Tidal Flats, Coastal Beach, and Coastal Bank.

#### 3.3.2 COASTAL BEACHES AND TIDAL FLATS

Coastal Beach is defined in 310 CMR 10.27(2) as:

Unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes Tidal Flats. Coastal Beaches extend from the mean low water line landward to the dune line, coastal bank line, or seaward edge of existing man-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.

A Tidal Flat is a part of a Coastal Beach and is defined as:

Any nearly level part of a Coastal Beach which usually extends from the mean low water line landward to the more steeply sloping face of the Coastal Beach or which may be separated from the beach by land under the ocean.

The regulated Coastal Beach areas within the Remediation Area are characterized by muddy and sandy sediment, with coarser material (including small stone and brick fill) above MHW. The MHW is at elevation 4.35 ft. NAVD88. The landward edge of the Coastal Beach (i.e., the Coastal Bank line) along the majority of the Remediation Area is defined by the seaward edge of the existing man-made structures (i.e., failing and aging bulkheads and fill/rip-rap stabilized slopes with some vegetation growth) that form the shoreline for the upland portion of the Project Site.

Approximately 25% of the Coastal Beach occurs at the base of the dilapidated bulkheads. The remainder is located at the base of the filled slopes that form the Coastal Bank.

Based upon a review of historic channel dredging plans, some marginal Coastal Beach has formed in the area of degraded bulkheads likely as the result of overland storm flow from the Disposal Site washing fine-grained fill into the adjacent area at the base of the walls, filling in portions of previously dredged channel area (Land Under the Ocean).

All areas of the Coastal Beach are also within areas of Land Subject to Tidal Action, which is defined as land subject to the periodic rise and fall of a coastal water body, including spring tides. Land Subject to Tidal Action is included with Coastal Beaches in the regulations (310 CMR 10.27). There are no separate performance standards identified for Land Subject to Tidal Action.

#### 3.3.3 LAND CONTAINING SHELLFISH

Land Containing Shellfish is defined in 310 CMR 10.34(2) as:

Land under the ocean, tidal flats, rocky intertidal shores, salt marshes and land under salt ponds when any such land contains shellfish.

Land Containing Shellfish occupies the same physical areas as Land Under the Ocean, as well as Coastal Beach and Tidal Flats. Shellfish Growing Area Designations by the Massachusetts Department of Marine Fisheries ("DMF"), September 2009, indicate that all of the Mystic River and associated embayments and coves are currently classed as prohibited as a shellfish growing area, which means the area is closed to the harvesting of shellfish. DMF's comment letter on the Project's DEIR noted the presence of soft shell clam shells (Mya arenaria), in certain marine areas at the Project Site; however, detailed sampling studies of the intertidal and subtidal areas at the Remediation Area found no viable shellfish in the inner end of the embayment (Land Under the Ocean) and minimal viable soft shell and razor clam presence in the adjacent Coastal Beach and Land Subject to Tidal Action areas. Very limited evidence of mussels and non-native crabs was found in the outer subtidal areas of the Remediation Area.

Under 310 CMR 10.34(3), Land Containing Shellfish is considered significant to this interest if it has been identified and mapped as such by the conservation commission or MassDEP in consultation with DMF. While surveys as noted above have demonstrated that shellfish habitat is non-existent or significantly impaired, particularly within the inner embayment, for purposes of wetlands resource assessment and NPC the marine areas referenced in this paragraph are assumed to be regulated as Land Containing Shellfish.

The marine habitats found in the surveyed area include, as further described below:

#### **Intertidal Habitats**

- Mud Flats The vast majority of the intertidal area is mud flat, with extensive areas of mud flat on the southern side of the embayment. Except in areas of shoreline erosion, the mud flats have a relatively low degree of rocks or shell fragments, together comprising less than 5% surface cover.
- Beach/Rocky (Rubble) Shore This occurs in a narrow transition zone between the mud flat areas and the non-tidal areas, with a muddy/sandy substrate with varying percentages of rocks and rubble originating from eroded fill on the developed Project Site.

• Salt Marsh remnant fragments. Note that these salt marsh areas are excluded from the Remediation Area and will not be disturbed.

#### **Subtidal Habitats**

- Monotypic silty mud bottom (dominant within inner embayment area), with a low percentage of shells and/or rocks, comprising less than 5% surface cover. SAV is also absent in these areas, save for some algae on some of the sparse rocks or bottom debris. Some larger debris is present (sunken timber barges and remains of the former development on the Remediation Area).
- Silty mud bottom (outer embayment area transitioned to Mystic River), with a significantly larger percentage (1-15%) of spent shells and shell hash present, along with more rocks and underwater structure/debris (0-5%), and some algae and sparse SAV (<1%).
- Coarser, silty/sandy bottom with increased shell hash and rock fragments (along Mystic River). Overall, shells cover 20-50% of the bottom and rocks comprise 30-50% of the bottom. On average 50-60% of the bottom has structural components, embedded in a sandy-silty matrix. SAV is limited to the occasional rock weed attached to rock and wooden structures (< 1% surface coverage). Some non-attached sea lettuce (*Ulva lactuca*) is present in trace quantities.

Boston Inner Harbor, including the Mystic River and the embayment, is home to a number of fish species and other marine life. Fish species include both commercial and recreational species, both bottom-dwelling and free-swimming water column species, and both resident and migratory species. Ecologically, the Remediation Area functions both as an ocean embayment and estuarine environment. Boston Inner Harbor's smaller coves provide spawning and nursery potential for a number of the Harbor's fish.

An intertidal and subtidal survey showed relatively few viable shellfish were found within the Survey area and at the Remediation Area, although relatively dense intact shells of dead soft shell clams were observed within the intertidal sediments (50-300/sq. m.) at the outer end of the peninsula only. Viable razor clams (*Ensis directus*) were observed as well as siphon holes. Additionally, occasional spent oyster (*Crassostrea virginica*) shells were also found throughout the same area. Only nine individuals of living soft shell clams were found in the intertidal area at the Remediation Area, and all of these individuals were juveniles less than 10 mm in size. The dead, intact soft shell clams observed within the intertidal area were of a mixed age class. The observations of intact soft shell clam beds with 100% mortality of older clams are suggestive of a relatively rapid mortality event within the recent past. Such

a mortality event could be associated with a rapidly occurring pollution event, such as a spill into the Mystic River, or the onset of shellfish disease. In the Boston Inner Boston area, large mortality events of soft shell clams have occurred in the past several years associated with the soft shell clam disease, neoplasia.

Table 3-1: Submersible ROV Camera Observations

Benthic Organism		Percent Cover*			
Common Name	Species Name	< 1% (trace)	1-5% (sparse)	5-10% (low)	
Sea lettuce	Ulva lactuca	EZ			
Tube worms	Riftia pachyptila	EZ			
Anemone	Anemonia sulcata	MR, EZ			
Snails	Crepidula, LIyanassa and Littorina	EZ	MR, MR/EZ		
Bloodworm	Glycera spp.			MR, MR/EZ, EZ	
Blue mussel	Mytilus edulis		MR, MR/EZ		
Barnacles	Cirripedia sp.		MR. MR/EZ		
Razor clam	Ensis directus	MR/EZ, MR			
Hermit crab	Paguroidea sp.	MR, MR/EZ, EZ			
Green crab	Carcinus maenas	MR/EZ	MR, EZ		
Flounder	Paralichthys sp.	MR/EZ, EZ	MR		
Sculpin	Cottus sp.	MR			
Soft shell clams	Mya arenaria	MR			

<sup>\*</sup>Location: MR - Mystic River; MR/EZ - Mystic River/Embayment Zone Transition; EZ - Embayment Zone

Observations taken by submersible ROV video observations on 38 sample plots within the three zones, August 2013 and April 2014.

Overall, the benthic habitat for shellfish in the waters abutting and near the Remediation Area is considered degraded due to chemical contamination and oxygen-poor sediments. The shellfish habitat in the upper embayment area is either non-existent (most noticeably at the extreme northern end) or significantly impaired with essentially no functionality. The Remediation Area had a recent viable soft shell clam population and sparse recolonization may be in progress with a few juvenile clams present. Other living shellfish are relatively sparse (i.e., occasional mussels attached to debris on the sediment surface, and razor clams). A few living blue mussels (*Mytilus edulis*) were observed on rock and wood attachment sites in the subtidal area, primarily in the Mystic River channel area, but not within the embayment and Remediation Area. Viable polychaetes (bloodworms; *Clycera* spp.) were observed within the sediments, but no viable Mollusca species were observed except for some surface snails (*Crepidula*, *Llyanassa*, and *Littorina* spp.). Green crabs (*Carcinus maenas*; a non-native species introduced in the 1800s) were present in low

numbers in the subtidal areas, but again primarily near the Mystic River channel. No sea scallop (*Placopecten magellanicus*) or surf clam (*Spisula solidissima*), living or shells, were found during these surveys.

Observations of fish during the surveys were limited; however, extensive fish surveys were not conducted. Several winter flounder and sculpin were observed, some within the embayment area. Certain intertidal and subtidal habitats are favorable for finfish nurseries in that they provide areas for cover, feeding, and development. For instance, salt marsh (intertidal) and subtidal eelgrass (*Zostera marina*) habitats provide nursery habitat for numerous fish species. Certain other benthic substrate conditions outside of salt marsh or eelgrass areas can also be good nursery habitat. Within the Remediation Area, however, fish nursery habitats are limited, with no areas of eelgrass present that can support nursery habitat. The four small salt marsh fragments provide limited if any nursery habitat potential.

Anadromous fish species are non-residents of the harbor waters, but can migrate through the general project area from the sea to breed in fresh water. Alewife (*Alosa pseudoharengus*) and blueback herring (*A. aestivalis*) are anadromous, usually entering the brackish estuarine waters by mid-May to spawn.

#### 3.3.4 SALT MARSH

Salt Marshes are defined in 310 CMR 10.32(2) as having this vegetative characteristic:

Dominant plants within salt marshes are salt meadow cord grass (Spartina patens) and/or salt marsh cord grass (Spartina alterniflora).

A review of the Disposal Site history, based on Chapter 91 licenses and historic maps, indicates that a significant portion of the land in this area adjacent to the water was created during the time of industrial development of the waterfront by filling in a salt marsh and tidal creeks. Salt marsh peat sediments are still observable along eroded banks of the fill slopes at certain locations. Two small residual areas of Salt Marsh (approximately 400± square feet (sf) total) of cord grass were observed in Everett, one of which is adjacent to an area of proposed sediment remediation, near the border with the Massachusetts Bay Transit Authority ("MBTA").

Residual areas of salt marsh were also noted within the City of Boston limits. Due to their extremely small size, the patches of residual salt marsh have extremely limited or no biological/physical characteristics of more intact salt marshes. Regardless, the small areas qualify as Salt Marsh in Boston and are assumed to be regulated as such.

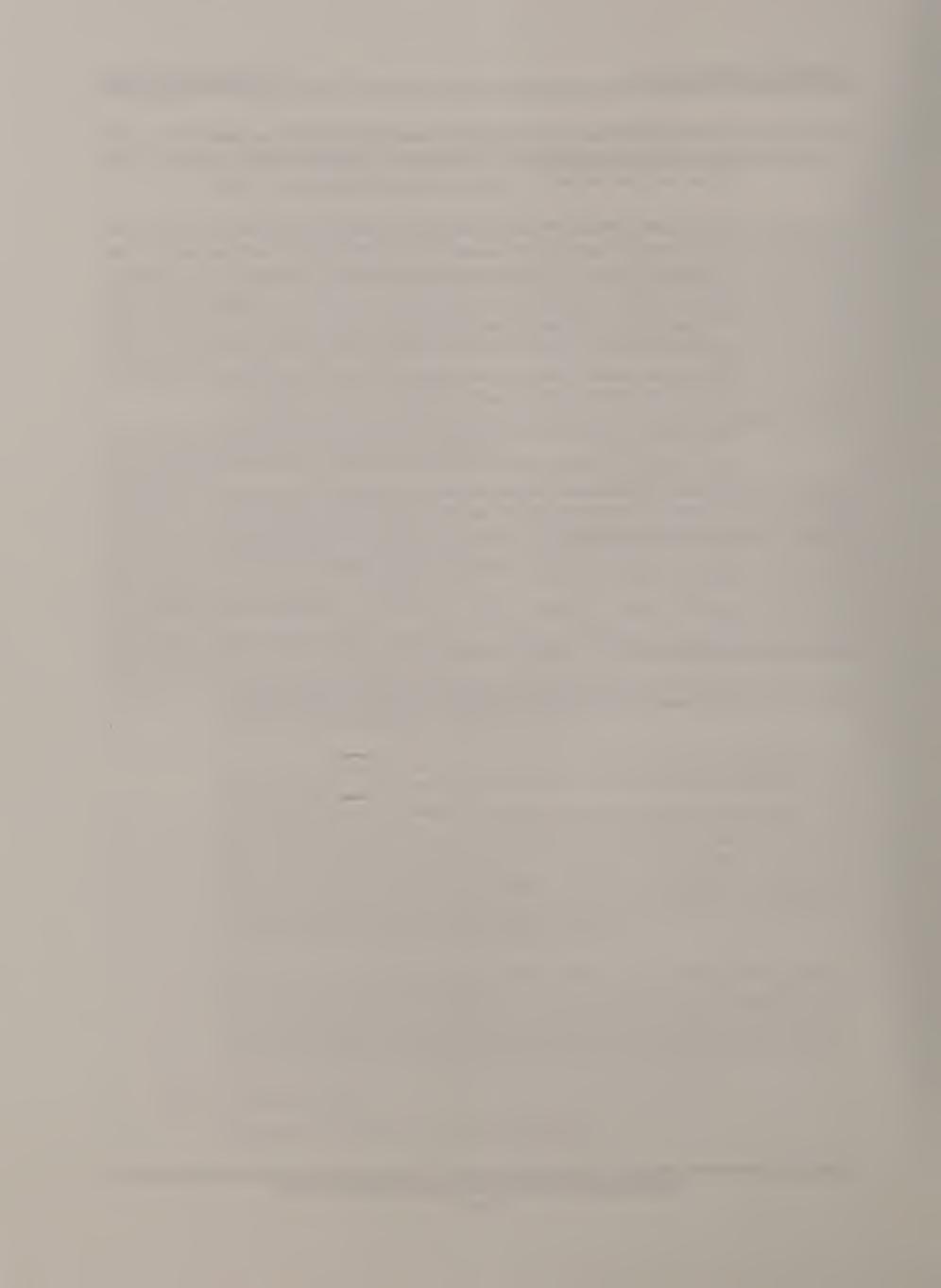
#### 3.3.5 COASTAL BANKS

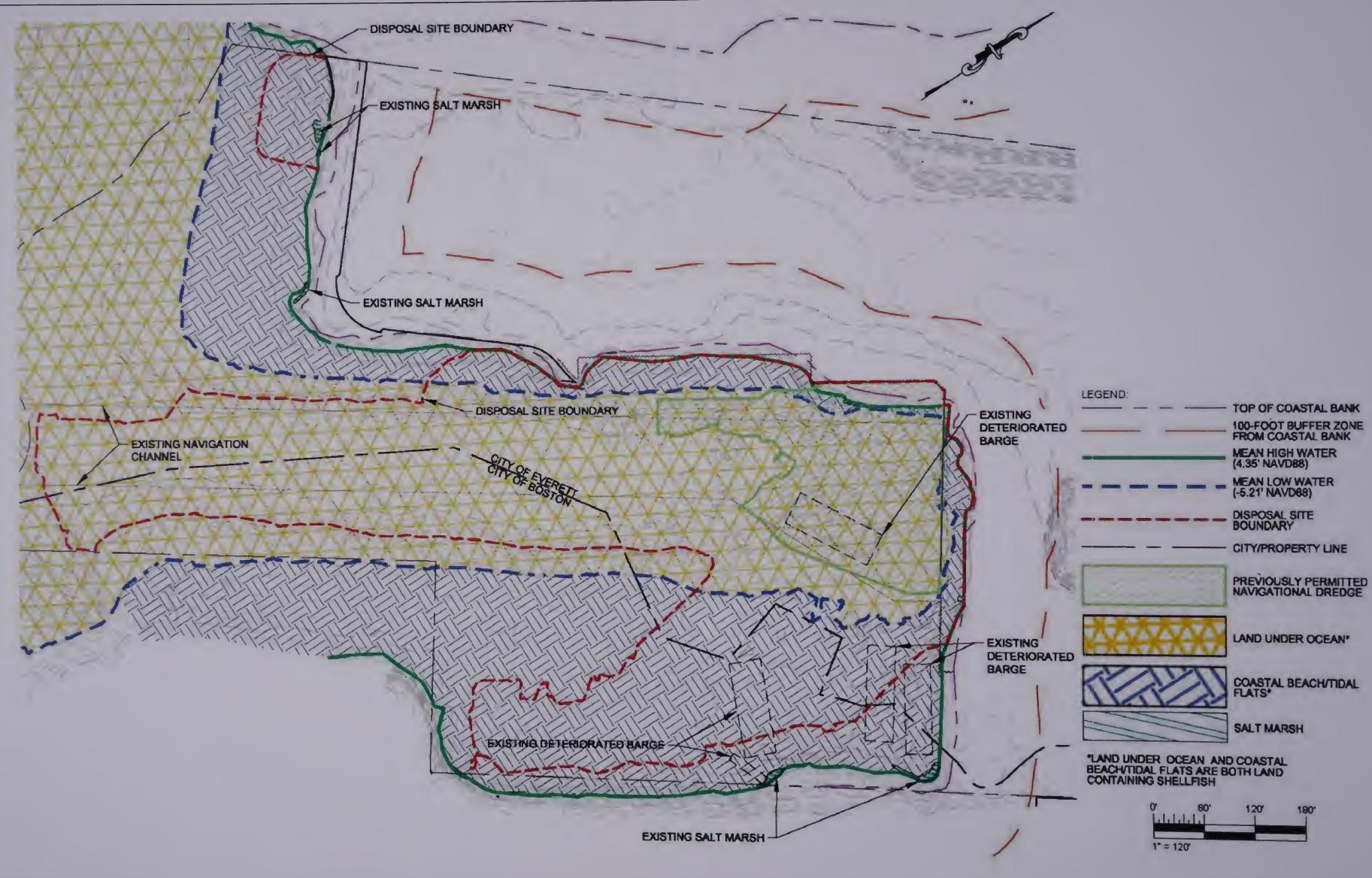
Coastal Banks are defined in 310 CMR 10.30(2) as:

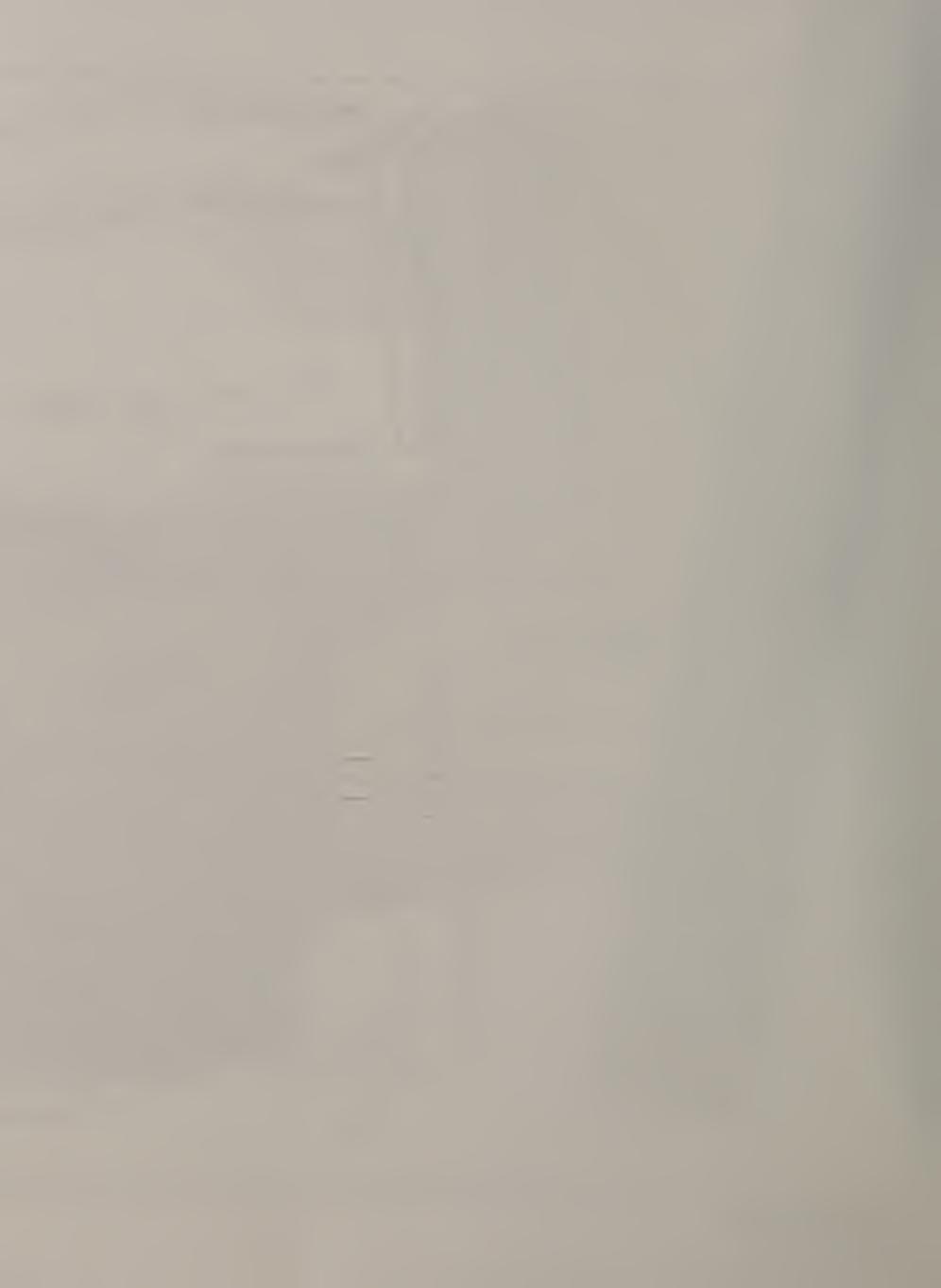
The seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a Coastal Beach, land subject Land Subject to Tidal Action, or other wetland.

The seaward edge, or toe, of the Coastal Bank begins at the landward edge of the Coastal Beach. Therefore, the Coastal Bank extends along the entire perimeter of the limits of the Project. The top of the Coastal Bank follows the top of the slope above the Coastal Beach and the existing seawall. The top of Coastal Bank on the Project Site (as shown on Figure 3-1) was delineated in October 2014 in accordance with MassDEP Policy 92-1. The upper limits of Bank within the City of Boston were not similarly delineated. However, the upper limits of Bank are beyond the limits of sediment remediation and will not be affected by the remediation.

The bulkhead portions of the Coastal Bank on the Everett portion of the Project Site are in significant disrepair, including deteriorated timber and stone bulkheads, loose gravel and boulders, and rotted timber piers and pilings. Demolition of the bulkheads and cleanup of the shoreline is currently underway and is anticipated to be complete prior to the start of sediment remediation. The non-bulkhead portions of the Coastal Bank are sparsely to densely vegetated with species typical of disturbed coastal sites. Dominant invasive species present within both Boston and Everett were observed to include spotted knapweed, Asiatic bittersweet, buckthorn, Japanese knotweed, Phragmites, seaside rose, and Tree of Heaven. Native woody species also present included beach plum, red cedar, crab apple, staghorn sumac, eastern cottonwood, and box elder. Native herbaceous species present included clover, various grasses, seaside goldenrod, common cinquefoil, sea lavender, and mugwort.







## Chapter 4

SEDIMENT REMEDIATION PROCESS, IMPACTS, AND MITIGATION



# CHAPTER 4: SEDIMENT REMEDIATION PROCESS, IMPACTS, AND MITIGATION

#### 4.1 PURPOSE AND NEED

Sediment remediation is proposed to mitigate the exposure of benthic organisms to contaminated sediments in the Remediation Area. Remediation activities may include dredging of impacted sediment, management and disposal of dredged material, backfill of material for capping and restoration of benthic habitat, monitoring to ensure the stability of the cap, and monitored natural recovery as discussed further in Section 4.5. This will result in a condition of No Significant Risk to the environment in accordance with the MCP. Figure 4-2 illustrates the maximum extent of the proposed dredge and cap.

Based on the Revised Phase II Report, impacted sediment within the Disposal Site does not pose a current or foreseeable future risk to human receptors, public welfare or safety; however, the concentrations of certain metals (arsenic, lead, mercury, and vanadium) in shallow sediments over approximately 7.0 acres of the Disposal Site pose a potential risk to benthic organisms under the MCP. Contamination landward of MHW (elevation 4.35 NAVD88) is currently being remediated per prior permitting. Navigational dredging activities described in the Project MEPA documents and permits are expected to be closely synchronized with the activities in the Remediation Area. The completion of the proposed remedial actions will result in a Permanent Solution under the MCP for the sediment portion of the Disposal Site.

#### 4.2 WORK ELEMENTS, SEQUENCE, AND SCHEDULE

#### 4.2.1 DEBRIS REMOVAL

Prior to the start of dredging activities, a debris survey will be performed and the debris will be removed to facilitate sediment remediation activities. Industrial debris related to marine activities has been identified in the embayment. This debris includes old piles and miscellaneous debris within the limits of the Remediation Area. Debris located within the Remediation Area will be removed and placed on a barge for stockpiling prior to transport off-site for disposal at an approved facility. Buried debris encountered during the sediment remediation will be segregated and handled in a similar manner.

#### 4.2.2 BARGE REMOVAL

In addition to one sunken barge, located entirely in Everett, four additional abandoned barges are located within the Remediation Area in the inner embayment.

These four barges were present at the time the Proponent acquired the property and must be removed prior to the commencement of sediment remediation. Two of the barges are entirely within Boston City limits ("Boston Barges"), and two are partially within each municipality ("Boston-Everett Barges"). Each of these four barges is situated within the intertidal zone. See Figure 4-1, Barge Removal Plan. While these barges are in various stages of disrepair, none appear to be structurally stable such that they can be removed with salvage equipment and floated off intact. As a result, they must be dismantled in place to be removed.

Removal will be conducted using barge mounted equipment due to the anticipated lack of access from the upland portion of the Project Site. The demolition materials will be loaded onto a combination of barges for removal and disposed of in accordance with applicable laws and regulations. The possible presence of asbestos, lead paint and other hazardous materials may require some special handling. Materials will be analyzed to the extent possible prior to demolition to determine the appropriate procedures for disposal.

#### 4.2.3 SEDIMENT REMEDIATION

As the most extensive dredge and cap alternative scenario in terms of impacts, dredging shallow sediment and placing a clean cap over the dredged sub-grade is proposed to mitigate the exposure of benthic organisms to contaminated sediments in the Remediation Area. This will result in a condition of No Significant Risk to the environment in accordance with the MCP. Figure 4-2 illustrates the maximum extent of the sediment remediation. Remediation activities will include dredging of impacted sediment, management and disposal of dredged material, backfill of material for capping and restoration of benthic habitat, and monitoring to ensure the stability of the cap.

Moreover, the sediment remediation includes Best Management Practices ("BMPs"), environmental controls, and mitigation measures that will be implemented in combination with remedial actions to comply with regulatory performance standards for resource areas and to protect the environment. The detailed design attributes of these BMPs, environmental controls and mitigation measures will be further described in individual permit applications.

#### 4.2.4 CONSTRUCTION SCHEDULE

The Proponent anticipates that the removal of four deteriorated barges, and sediment removal from the Remediation Area could be completed in one season, depending on the starting date of construction and seasonal conditions. However, it may be necessary for the work to be completed over two construction seasons between 2017 and 2019. Unless otherwise waived or adjusted, in-water work will be subject to Time

of Year ("TOY") restrictions established by the DMF. TOY restrictions are put in place so as to reduce possible adverse impacts to ecological populations within the dredged area. Several diadromous fish species are known to utilize the Mystic River, including alewife (Alosa pseudoharengus), blueback herring (A. aestivalis), white perch (Marone americana), American eel (Anguilla rastrata) and American shad (A. sapidissima). Winter flounder (Pseudopleuronectus americanus) has also been observed to be present and potentially spawning in the Mystic River. To meet the TOY restriction, silt-generating in-water activities in the water-side portion of the Site can only be conducted between September 30 and February 15.

Table 4-1 presents the generally anticipated sequencing.

Table 4-1: Generalized Sequence of Activity for Sediment Remediation Activities

No.	Activity	Previously Permitted Activities	Sediment Remediation Activities
1	Barge Removal		X
2	Intertidal Sediment Remediation Dredging & Backfill with Clean Material		X
3	Navigational Dredging (and removal of one sunken barge in Everett)	X	
4	Subtidal Sediment Remediation Dredging		X
5	Installation of Guide Piles for Floats	X	
6	Subtidal Sediment Remediation Capping		X
7	Replacement of any Impacted Salt Marsh (contingency)		Х
8	Repair of stormwater outlet protection at existing stormwater discharge location (BWSC property)		X

Any construction sequence is subject to change based on unexpected conditions encountered in the field, and some means and methods must be left to the contractor once the job is bid and contracted. The schedule will respect the necessary TOY restrictions. Once the project is contracted, a final construction sequence will be developed and available.

#### 4.3 EXTENT OF REMEDIATION

As shown on Figure 4-2, in the most extensive dredge and cap alternative scenario dredging and capping will occur in the embayment, the eastern tidal flats, and a small portion of the

western tidal flats. This includes an area referred to as the "Navigational Dredge Area" where dredging to improve navigation was previously approved. In the Navigational Dredge Area, up to an additional two feet of sediment (to approximately 12 feet below MLW or elevation-17 NAVD88) will be dredged for remediation purposes. The area will then be backfilled with a remedial cap yielding a final grade of approximately 10 feet below MLW (or elevation -15 NAVD88) which is the proposed final elevation identified in the January 2016 Water Quality Certification. In the remaining portions of the Remediation Area, sediments are anticipated to be removed up to approximately 2 feet below the existing mudline and backfilled with a 2-foot cap, thereby restoring the existing mudline. An overdredge allowance of up to one foot is included to account for construction equipment inaccuracies.

The proposed dredging and capping will provide clean material beyond the burrowing depths that are typically attained by most of the shellfish and other benthic invertebrates within the intertidal zone (in particular soft-shell clams, Atlantic razor clams, sand worms and blood worms).

#### 4.3.1 SUMMARY OF IMPACTS IN REGULATED RESOURCE AREAS

Work elements in regulated coastal resource areas can be divided between those occurring above MHW and those occurring below MHW. Below MHW, the coastal resources are Coastal Beach and Tidal Flats (within Land Subject to Intertidal Action), and Land Under the Ocean (Land Containing Shellfish is within both of these areas below MHW). Barge and dredge removal operations are designed to avoid impacts to salt marsh, which are outside the dredge footprint.

A description of alterations to resource areas in the cities of Everett and Boston is provided in Table 4-2.

Table 4-2: Summary of Jurisdictional Activities in Coastal Resource Areas

Resource Area	Alterations <sup>1</sup> (sf)			
Resource Area	City of Everett		City of Boston	
Land Under the Ocean	158,373 ±	Dredging and Debris Removal	56,090 ±	Dredging and Debris Removal
		Backfill		Backfill
Coastal Beaches and Tidal Flats	36,280 ±	Dredging and Debris Removal	55,525 ±	Dredging and Debris Removal
		Backfill		Backfill

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<sup>&</sup>lt;sup>1</sup> All alterations are due to dredging and backfill activities necessary for remediation. Unit of measure is sf.

Posource Area	Alterations <sup>1</sup> (sf)			
Resource Area	Cit	ty of Everett	City of Boston	
Land Containing Shellfish <sup>2</sup>	194,654 ±	Dredging and Debris Removal	111,615 ±	Dredging and Debris Removal
3110111311		Backfill		Backfill

#### 4.3.2 IMPLEMENTATION OF DREDGING OPERATION

Mechanical dredging is proposed for the portion of Remediation Area to be dredged. Proposed dredging depths are anticipated to be approximately 2 feet below the existing mudline or the previously permitted elevation of 10 feet below MLW (or elevation -15 NAVD88) in the Navigational Dredge Area with an anticipated overdredge allowance of up to one foot. Approximately 36,030 CY of sediment, in addition to the previously approved 17,335 CY of navigational dredging, are planned to be removed (for a total of approximately 53,365 CY of sediment). Included in the remediation dredge volume is a relatively small amount of sediment (approximately 2,000 CY), which may be removed to facilitate the demolition and removal of the abandoned barges.

Sediment will be dredged using an excavator or crane equipped with an environmental clam shell bucket ("bucket"). The bucket will be lowered through the water column to the bottom. The dredged material will be transferred into a hopper barge or scow. Once the material is loaded into the receiving vessel, the contractor will have the option to decant water at the Remediation Area or to decant the effluent once the material has reached the contractor's offloading facility:

Discharging Decanted Water: The Proponent anticipates that the contractor will decant the free water from the sediment in the scow within the turbidity curtain at the Remediation Area. Scows typically have a sump pit in the corner to facilitate decanting/dewatering of sediment. Depending on the scow size and set-up, decant water will be pumped from the sump through a geotextile liner placed in the scow, or using a screened suction hose to minimize passing of solids.

Disposing Decanted Water at Offloading Facility: Alternatively, dredge water may be pumped into a mobile settling tank mounted on a barge or into a sealed holding barge

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<sup>&</sup>lt;sup>2</sup> Areas included in this calculation were assessed to be theoretically viable habitat for shellfish based on field observation by biologists from GZA in August 2013, April 2014 and September 2015. Land Containing Shellfish includes both Land Under Ocean and Coastal Beach/Tidal Flats. Permanent and temporary impacts to Land Containing Shellfish therefore overlap with impacts accounted for in Land Under the Ocean and Coastal Beach/Tidal Flats.

and transported to an offloading facility. The Proponent understands that if decanting operations occur at an off-site facility additional permitting may be required.

Modifications of these two methods may include allowing the scow to sit to allow the sediment to air-dry, using Geotubes to consolidate and dry the material, or adding solidification agents to accelerate the drying process and to control odors. The Proponent will leave these methodologies as available options until the contractor is selected and the means and methods are submitted. The contractor will be required to submit an odor control plan along with the selected sediment management options.

At the offloading facility the dredged sediment will be tested for free water prior to transport (Paint Filter test). After any additional drying and/or stabilization required to pass the Paint Filter test, the material will be loaded onto trucks or rail cars for transport to a properly licensed facility for reuse or disposal.

#### 4.4 RESTORATION MATERIALS ("CLEAN BACKFILL")

The primary function of the clean backfill layer to be placed in the Remediation Area is to provide a clean substrate suitable as habitat for benthic organisms. Evaluations for the purposes of this NPC have focused on the appropriate depth of capping and dredging necessary to limit exposure of benthic organisms to the residual contamination to be left below the cap. The specific nature of the material to be placed will also be influenced by the physical location of the cap and regulatory requirements covering those areas (e.g., sand or silty sand will likely be used in areas classified as Coastal Beaches).

Many species of benthic macroinvertebrates live and feed in burrows in the sediment. Burrow construction and maintenance results in vertical and horizontal movement of sediment particulates; this process is referred to as "bioturbation." Benthic invertebrates may be exposed to residual contaminants if their burrows extend through the cap, and bioturbation can result in contamination of the clean cap material. Therefore, the cap must be designed to minimize burrowing through the cap and into the residual material below.

Minimizing the degree of burrowing through the cap can be accomplished by providing a cap thickness that is greater than the burrowing depth of most species. This may also be accomplished by incorporating a physical barrier to burrowing in the bottom layers of the cap (e.g., gravel or stone layer, or geotextile fabric). For the majority of the Remediation Area, it is assumed that the cap will be constructed without a physical barrier to burrowing, so that the cap thickness will have to be sufficient to minimize burrowing through the cap to the sediment below.

The U.S. Army Corps of Engineers, Dredging Operations and Environmental Research Program ("DOER") (Clarke, Palermo and Sturgis, 2001) provides guidance for cap thickness considerations to limit bioturbation of the contaminated sediment below subaqueous caps. For sand caps in coastal marine waters, the DOER recommends total cap thicknesses of 20 to

45 cm (0.65 to 1.5 feet) to address overall bioturbation. The recommended range accommodates a surficial layer of 10 cm that is often found to be intensively mixed, and a mid-depth bioturbation zone spanning 10 to 45 cm.

#### 4.4.1 PLACEMENT OF RESTORATION MATERIALS

There are several viable methods for placing the cap in the subtidal and intertidal areas. The means and methods to be used for the Remediation Area will be identified by the contractor once the job is bid and contracted. However, potential methods for placement of the cap are discussed below.

One method for placing the cap in the subtidal areas consists of essentially reversing the dredge operation, using the same equipment as was used during the dredging operations. The equipment would be decontaminated after the completion of dredging operations. The sand, rip rap, or other material is imported to the Remediation Area, likely on a material barge from the transfer facility. The material barge is maneuvered to the capping location. When the material barge is tied off to the work barge, the excavator or crane lowers the environmental bucket to the required depth and slowly spreads the cap material over the previously dredged area.

Use of tremie pipe to direct material from a floating barge through the water column or thin-layer placement through the water column (by way of measured placement at the water surface which is allowed to settle through the water column) may also be employed.

In the intertidal, the cap material will be slowly placed into the surveyed excavation in lifts and graded to the design thickness. In the event that backfilling activities cannot be completed during one low tide period, the leading dredge face (excavation face) may be covered with a temporary plastic membrane and secured with sandbags/backfill material until the next tidal cycle that permits work to resume.

#### 4.5 ALTERNATIVES ANALYSIS: MCP REMEDIATION FRAMEWORK

As detailed in this section, the Proponent is conducting an evaluation of project alternatives in order to comply with the MCP and the alternatives analysis required for Section 401 WQC (314 CMR 9.00) and authorization under Pre-Construction Notification ("PCN") of the Section 404 Massachusetts General Permit. The final alternative will be selected to provide the best mix of benefits with regards to reduction in contaminant concentrations, certainty and timeliness of achieving a Permanent Solution, disturbance/alteration of resource areas, and capital cost. The Proponent is in the final stages of analyzing several variations of the dredge limits in order to complete permitting of the remediation. The detailed evaluation and final remedy selection will be presented in the Phase III Report for the sediment portion of the Disposal Site (expected to be submitted to MassDEP in June 2017).

#### 4.5.1 REGULATORY REQUIREMENTS FOR ALTERNATIVES EVALUATION

The analysis described herein has been conducted in order to assess whether alternative forms or methods of remediation would satisfy the MCP objectives with less activity or impact within applicable jurisdictional resource areas, including Waters of the Commonwealth and Waters of the U.S.

The alternatives assessment has also been used as a framework to evaluate the feasible alternatives and to demonstrate that there are no practicable alternatives that have less impact to the resource areas that would also meet the MCP driven clean-up goals, thus meeting the need for alternatives analyses that are a necessary part of the environmental permitting processes for the work.

The MCP focus on feasible alternatives also addresses the analysis required under Section 401 and 404 of the Federal Clean Water Act and related regulatory standards under the Massachusetts Clean Water Act. These provide that the project must avoid and minimize to the maximum extent practicable discharges of dredged or fill material to U.S. waters (General Condition 15(a) of the Section 404 Massachusetts General Permit for Pre-Construction Notification permits) and demonstrate that there is no practicable alternative to the discharge that would have less impact on the aquatic ecosystem (314 CMR 9.07 (1)). The latter regulation limits the consideration of alternatives to those which are available and capable of being undertaken after taking into consideration costs, existing technology and logistics in light of the overall project purpose, and which are permittable under existing federal and state statutes and regulations. As detailed below, the Project meets the 401/404 alternative analysis requirements.

The sediment remediation also meets the alternatives analysis requirement in the Massachusetts Wetlands Protection Act because the sediment remediation is eligible for Limited Project designation. A "Comprehensive Remedial Action Alternative" that is selected in accordance with the provisions of 310 CMR 40.0851 through 40.0869 shall be deemed to have met the requirements of the alternatives analysis standards listed in 310 CMR 10.24(7)(c)6.a. The proposed sediment remediation is a Comprehensive Remedial Action Alternative that was selected in accordance with the aforementioned requirements of the MCP and therefore is presumed to meet the performance standards for an alternatives analysis.

#### 4.5.2 SELECTION OF REMEDIAL ACTION ALTERNATIVE

Under the MCP, the alternatives analysis begins with an initial technology screening process to identify those which are suitable for the contaminants and conditions at the Disposal Site. These technologies included:

- Monitored Natural Recovery (MNR) which uses ongoing, naturally occurring
  processes to contain, destroy, or reduce the bioavailability or toxicity of
  contaminants in sediment. This includes processes that convert contaminants
  to less toxic forms (e.g., biodegradation), processes that bind contaminants
  more tightly to the sediment (e.g., sorption), and processes that bury
  contaminated sediment beneath clean sediment (e.g. sedimentation).
- In situ treatment (amendment) which involves the addition of a substrate to the natural sediment to degrade, immobilize, or reduce the toxicity of the contaminants of concern (e.g., biological treatment, chemical treatment or immobilization through solidification or stabilization);
- Enhanced sediment deposition whereby permanent (or semi-permanent) structures are installed to alter flow dynamics and increase natural deposition of sediment on the bottom.
- Dredging where the contaminated sediments are physically removed from their current location and treated or disposed of either on-site or off-site.
- Capping where clean cover material (sand, gravel, rip rap) is placed directly onto the contaminated sediment.

MNR, dredging, and capping were retained as technologies which were suitable as either a standalone remedy or as a component of a remedy in conjunction with another technology. Enhanced sediment deposition is not practicable as it could adversely affect the benthic community and would adversely affect the use of the channel (and potentially the river) for navigation. In situ treatment is not practicable as it is primarily used to treat migration of dissolved contaminants from sediment to surface water (which is not an issue at this Disposal Site) and the amended sediment may not be a good substrate for benthic organisms.

The retained technologies are being assembled into a range of remedial action alternatives which might reasonably achieve a condition of No Significant Risk. The most likely alternatives will include a combination of dredging and capping with MNR, or remediation and capping of the entire Remediation Area. Three possible alternatives are being considered for the NPC:

<u>Alternative 1 – Full Dredge and Cap</u>. Dredging of the entire Remediation Area followed by capping with two feet of clean material (Figure 4-2).

<u>Alternative 2 – Partial Dredge and Cap.</u> Dredging and capping the majority of the Remediation Area with capping alone used in the deep channel (Figure 4-3).

Alternative 3 – Partial Dredge, Cap, and MNR. Dredging and capping of the eastern portion of the Remediation Area and the isolated tidal flat area with MNR for the remainder (Figure 4-4).

These alternatives are being subjected to a detailed evaluation using the following criteria as required by the MCP: effectiveness, short and long-term reliability, implementability, cost, risks, benefits, timeliness, non-pecuniary interests, and greener cleanups.

The detailed evaluation of alternatives for the sediment remediation will also consider "No Further Action." For the purposes of the sediment remediation, "No Further Action" would mean that no additional efforts would be conducted to mitigate the existing conditions or to further monitor impacts. As previously described, the sediment remediation's purpose is to eliminate or mitigate risks so that a condition of No Significant Risk is reached and a Permanent Solution as defined by the MCP is achieved. Therefore, the "No Further Action" alternative would fail to achieve the stated purpose of the sediment remediation.

As previously noted, the Proponent is in the final steps of analyzing several variations of the dredge limits. However, this NPC fully describes the impacts and methodologies of Alternative 1 – Full Dredge and Cap, as it is considered to have the most extensive impacts of any of the alternatives. The relative areas and volumes of dredging and capping in each alternative are presented in Table 4-3:

Table 4-3: Dredging, Capping, and MNR Areas and Volumes for Navigational Dredge and Remediation Alternatives

Alternative	_	Permitted n Dredge	Remediati	on Dredge	Remedia	tion Cap	MNR
	Area <sup>1</sup>	Volume	Area <sup>1</sup>	Volume <sup>2</sup>	Area <sup>1</sup>	Volume <sup>3</sup>	Area <sup>1</sup>
Alternative 1 – Full Dredge and Cap	1.6 acres	17,335 CY	7.0 acres	36,030 CY	7.0 acres	25,000 CY	0 acres
Alternative 2 – Partial Dredge and Cap	1.6 acres	17,335 CY	5.2 acres	27,300 CY	7.0 acres	25,000 CY	0 acres
Alternative 3 – Partial Dredge, Cap, and MNR	1.6 acres	17,335 CY	4.0 acres	21,300 y	4.0 acres	14,100 CY	3.0 acres

Notes:

<sup>&</sup>lt;sup>1</sup> Areas shown on Figures 4-2, 4-3, and 4-4.

Each of the above alternatives will remove significant quantities of oil and/or hazardous material (OHM) from the environment; it can be implemented in a manner that will not pose a significant risk of harm to health, safety, public welfare or the environment; and it is likely to result in the reduction and/or control of OHM to a degree and in a manner such that the requirements of a Permanent Solution as set forth in 310 CMR 40.1000 will be met.

Dredging is a proven technology for the remediation of metals-impacted sediment; however, dredging alone could potentially expose more contaminated sediment present at depth. Therefore, the installation of a cap is necessary to prevent direct contact by the benthic community. Dredging prior to capping reduces the overall alteration of coastal resources in the intertidal and subtidal by maintaining current elevations. In addition, this combination avoids potential conflicts with planned uses for the property and allows for sufficient water depth to minimize potential disturbance of the cap. Monitoring of the stability of the cap will be conducted to ensure that the conditions required for a condition of No Significant Risk are maintained in the future. MNR monitoring will be conducted to ensure that the burial of the contaminated sediment by naturally occurring processes is progressing as anticipated.

The short-term risks associated with dredging and capping can be managed using aquatic and airborne environmental controls, and long-term habitat restoration and residuals management can be addressed by backfill placement following dredging. There will be no upland space available for sediment processing and handling within Disposal Site boundaries; however, this is not an uncommon issue for industrial properties where space is generally limited, and can be addressed by conducting dewatering, transport, and sediment offloading over water instead of at an upland staging area.

The specific components of the proposed remedial alternatives include:

Sediment Removal via mechanical dredging with an environmental bucket;

Aquatic Environmental Controls, specifically the use of turbidity barriers around the dredge area. The specific turbidity and discharge criteria for this project will be established by the WQC, and turbidity controls will be maintained throughout the dredging process.

<sup>&</sup>lt;sup>2</sup> Remediation Dredge Volume based on two feet of dredging plus one foot overdredge (three feet total). Remediation dredge volume also includes 2,000 CY which may be removed to facilitate the demolition and removal of the abandoned barges.

<sup>&</sup>lt;sup>3</sup> Remediation Cap volume based on two feet of clean material.

<u>Airborne Environmental Controls</u>, including dust and odor monitoring and control measures as needed;

<u>Dewatering</u> within the Site boundaries (or at an off-site facility) via decanting and/or Geotubes, followed by the addition of stabilizing agents if necessary;

Transportation of dewatered dredged material via barge to an offloading facility;

Reuse or disposal of the dredged material at a suitable licensed/permitted facility; and

<u>Backfilling</u> of the dredge area with clean material for residuals management and habitat restoration.

Monitoring of the thickness of the cap to ensure that changes in site conditions which could result in a risk to benthic organisms do not go undetected.

Monitoring of sedimentation rates, contaminant concentrations, and benthic organisms to ensure that MNR processes are occurring at the necessary rates.

The proposed alternatives focus upon the physical removal of the most heavily contaminated sediment. The proposed sediment remediation approaches meet the necessary environmental standards for avoiding or reducing impacts to aquatic resources to the maximum extent practicable (while addressing the contamination) by limiting work within the water, focusing on productivity during dredging windows, and employing BMPs throughout the project. There are no practicable alternatives for accomplishing the needed environmental remediation goals that would involve less impact in waters of the U.S. and resource areas jurisdictional under the abovementioned regulations. No work is proposed in an Outstanding Resource Water, as defined in 314 CMR 9.00 and 310 CMR 10.00.

The final alternative will be selected to provide the best mix of benefits with regards to reduction in contaminant concentrations, certainty and timeliness of achieving a Permanent Solution, disturbance/alteration of resource areas, and capital cost. The detailed evaluation and final remedy selection will be presented in the Phase III Report. The final alternative implemented for the Disposal Site may involve less dredging (and therefore less impact) than the currently proposed alternative.

#### 4.6 MITIGATION MEASURES

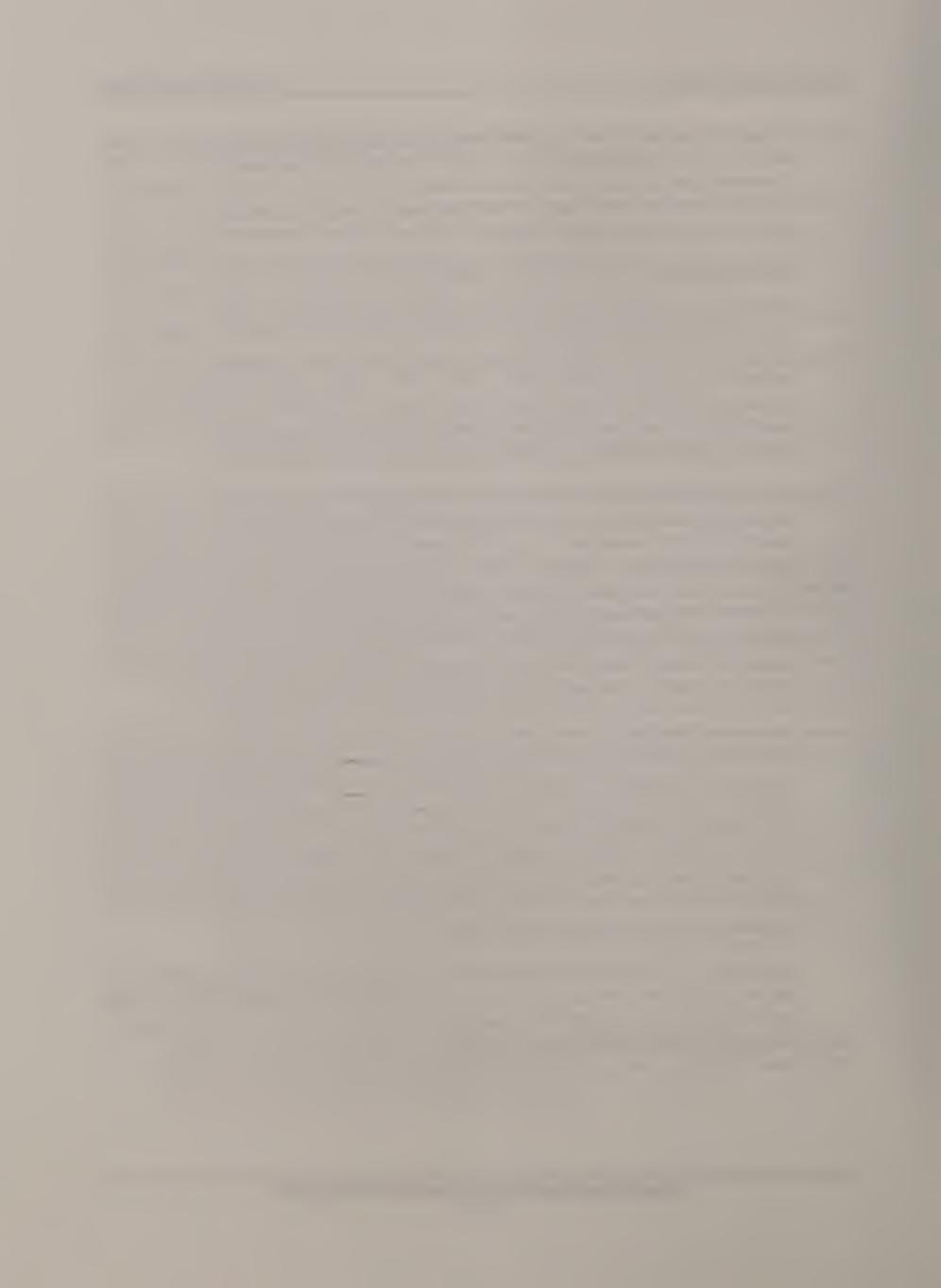
Dredging and capping by their nature will cause unavoidable temporary construction-related impacts to habitat. Once the Sediment Remediation has been completed, however, the habitat within the Disposal Site will be greatly improved.

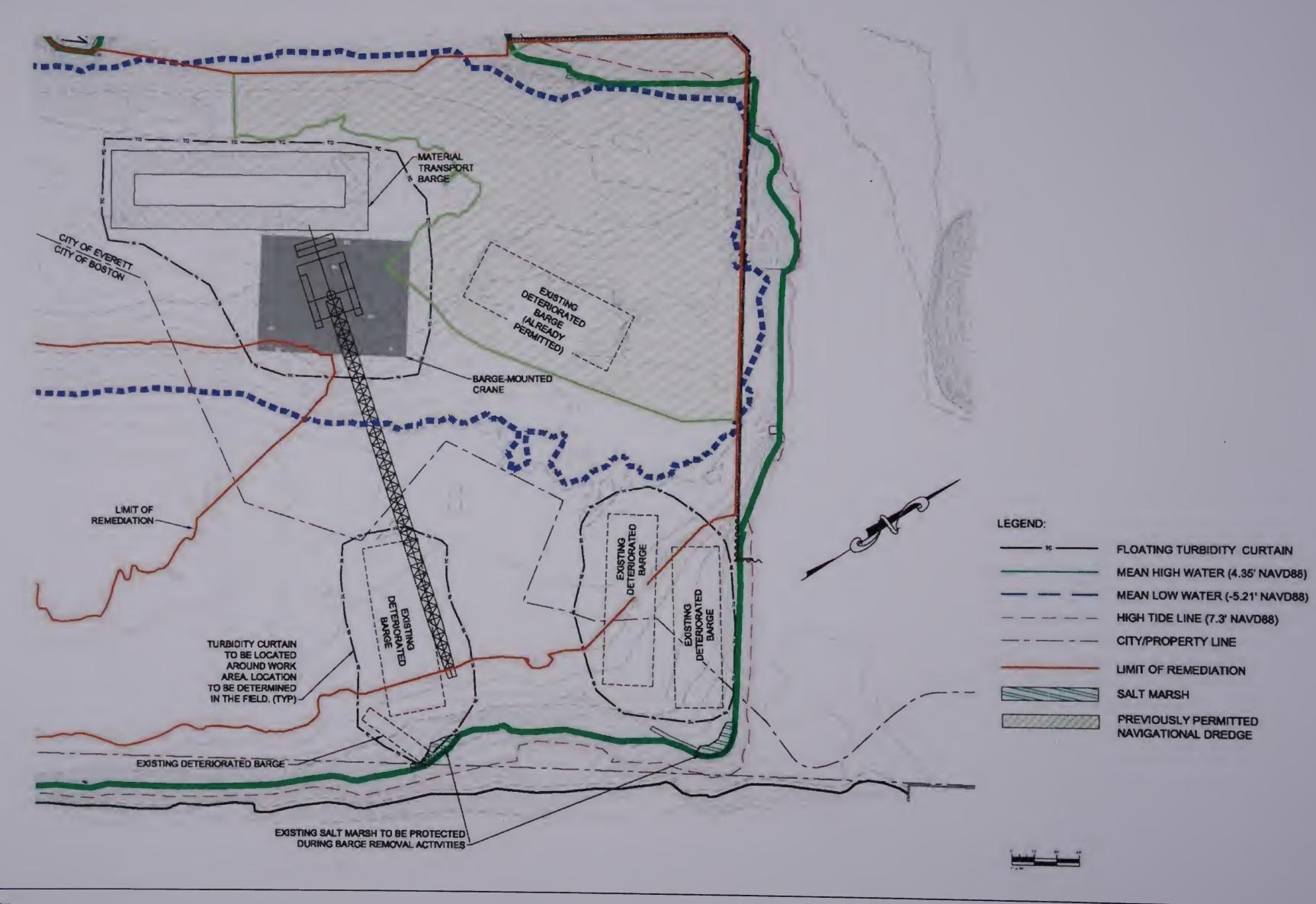
The activities below HTL in the Remediation Area, including debris removal, derelict barge removal, and dredging/capping work will, by necessity, take place in Waters of the Commonwealth and jurisdictional surface Waters of the U.S. Activities will be conducted in a manner which minimizes potential adverse impacts to surface waters and Waters of the Commonwealth and mitigates unavoidable adverse impacts. Potential adverse impacts include releases of suspended sediment and associated contaminants during dredging and, to a lesser extent, during the early stages of capping. In compliance with provisions of the Water Quality Certification regulations 314 CMR 9.07, and similar provisions in Section 401 and Section 404 of the Federal Clean Water Act as cited in the Alternatives Analysis, the dredging and dredged material management will be conducted in a manner that provides protection of human health, public safety, public welfare, and the environment. In compliance with DMF recommendations, and unless TOY restrictions are waived, the inwater work will be scheduled to occur between September 30 and February 15 to avoid seasonal impacts to diadromous fish during spawning and/or migration periods.

BMPs which will be implemented to protect water quality include the installation of turbidity barriers and floating oil booms during dredging and capping, as well as water quality monitoring during remediation to evaluate potential environmental impacts and allow for early intervention and mitigation. If water quality monitoring indicates the potential for adverse impacts, additional mitigating measures will be implemented, including adjusting turbidity barriers and modifying construction methods and equipment as needed to minimize potential impacts. Additionally, a cleanup crew and boat with oil spill kits will be available during the in-water work, and can be rapidly deployed if needed. Engineering and construction BMPs will be used during dredged material transport and management.

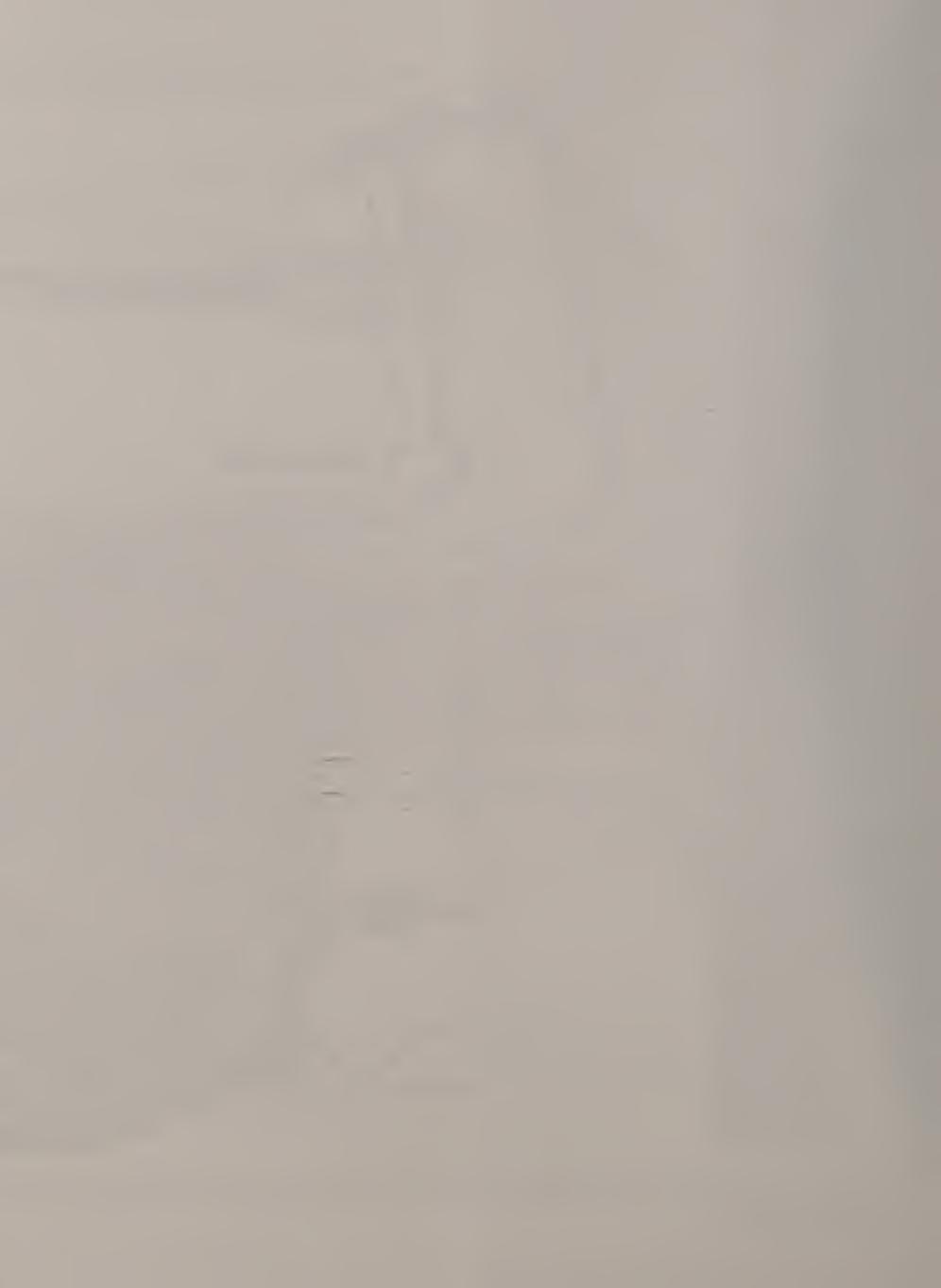
Measures will be taken to avoid impacts to the two remnant patches of salt marsh within the City of Boston as they are outside of the dredging footprint; however, they are located in close proximity to the barges that must be removed and are also directly adjacent to dredge footprint. The two salt marshes in the City of Everett will be protected by living shoreline which will be constructed in those areas prior to the start of the sediment remediation activities. During the sediment remediation steps will be taken to ensure that the living shoreline is protected. This will likely include the use of hand tools to excavate immediately adjacent to the living shoreline and sequencing removal and capping activities so only a small portion of the area is disturbed at any one time.

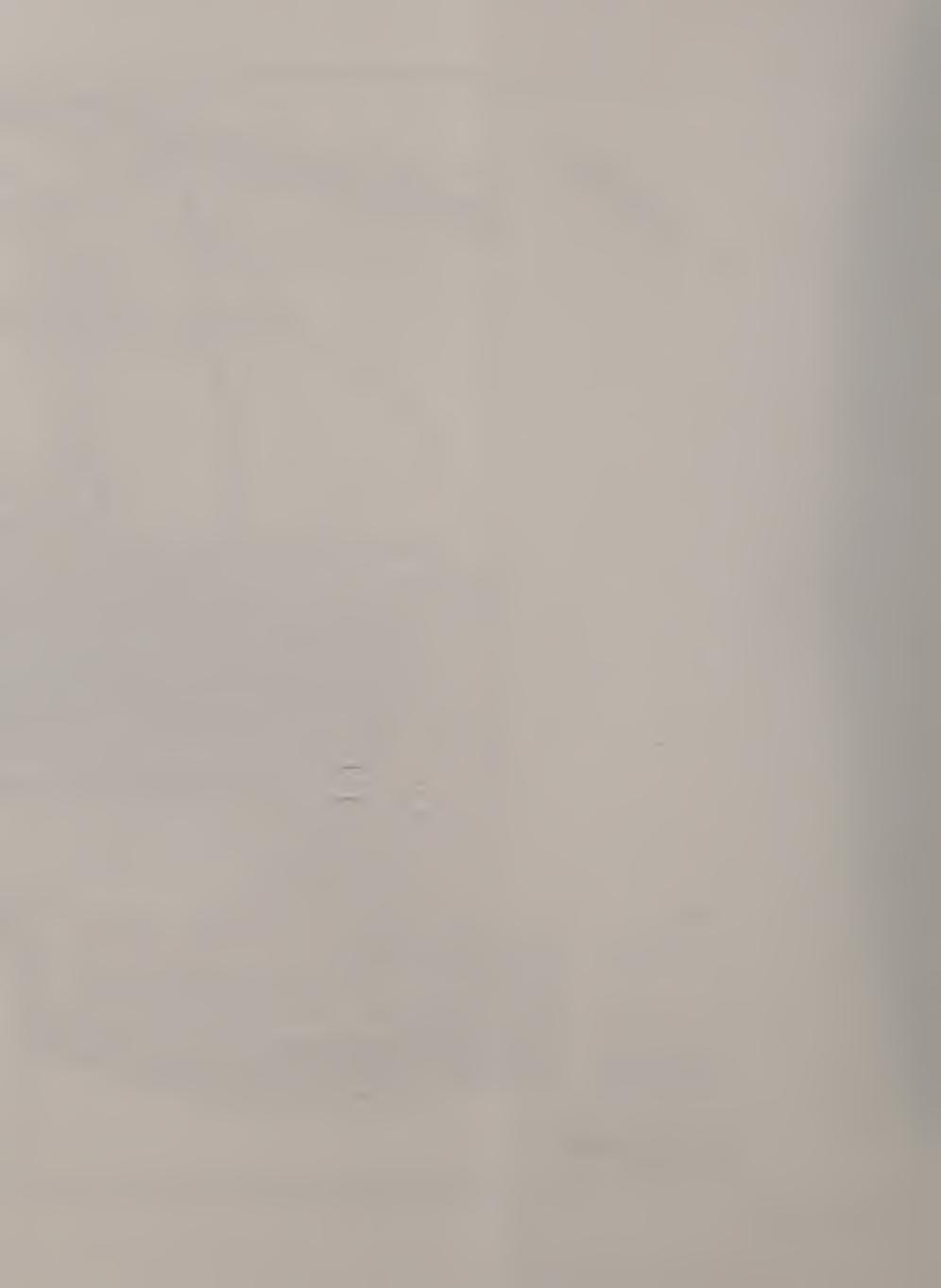
If salt marsh is inadvertently impacted during the dredging/capping operations, Spartina spp. will be planted in the same general location as the existing remnant patches. The area of salt marsh planting will be extended to encompass a larger area than was impacted, and to enhance the intertidal habitat value of the area.

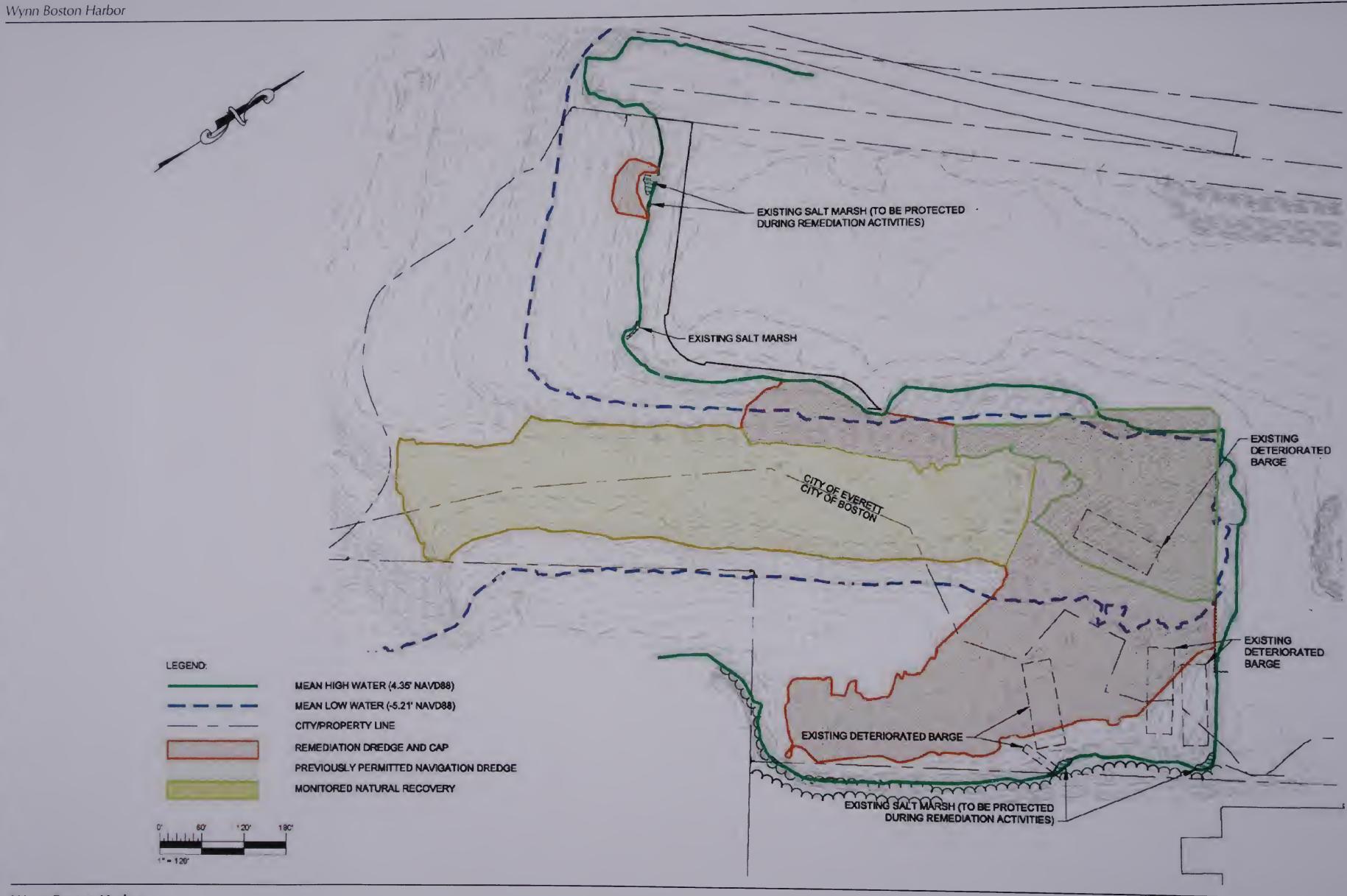




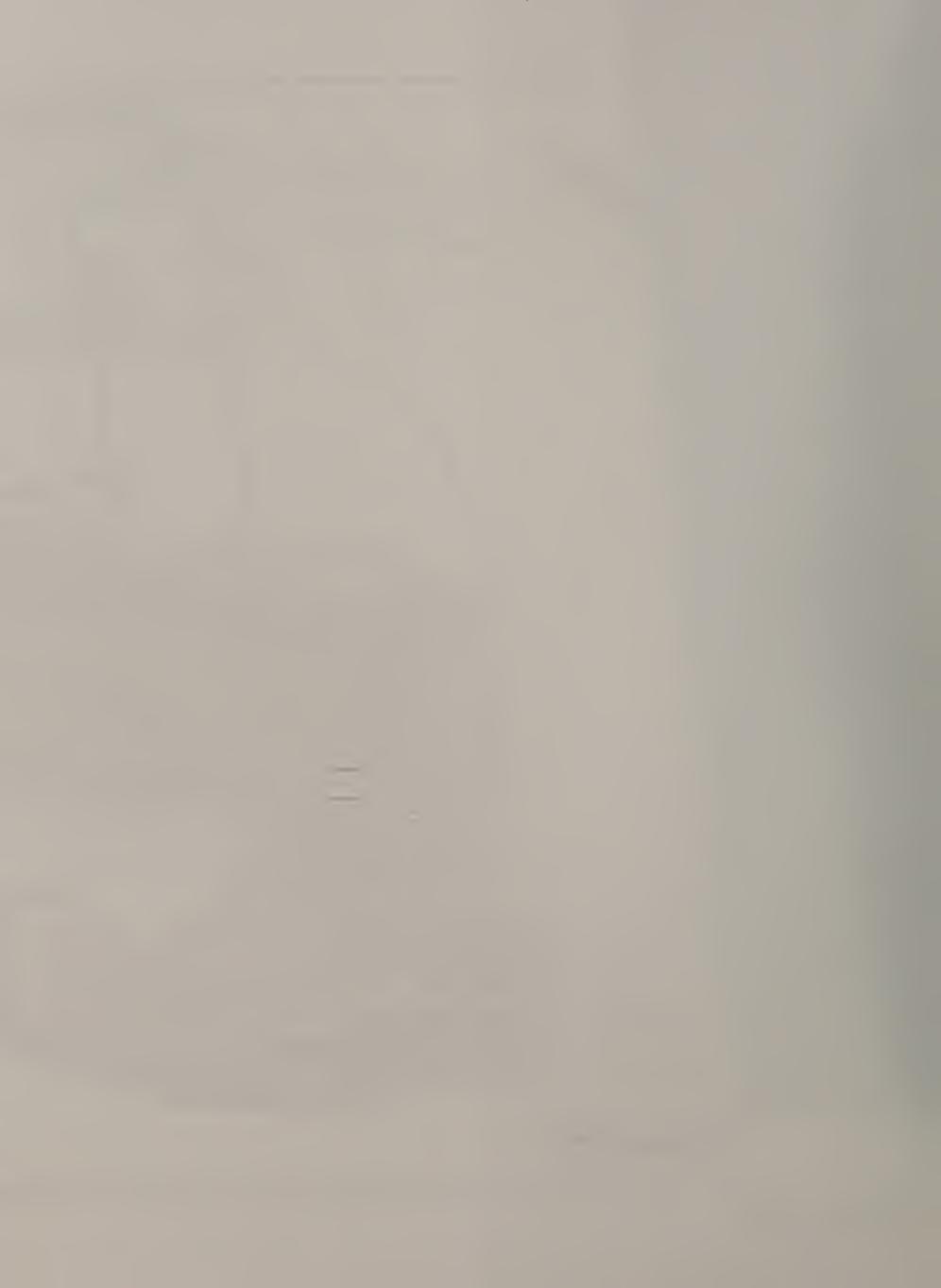








Wynn Boston Harbor Everett, Massachusetts



## Chapter 5

# STATUS OF PROJECT MITIGATION MEASURES



## CHAPTER 5: STATUS OF PROJECT MITIGATION MEASURES

#### 5.1 INTRODUCTION

As described in this NPC, the Project as described in the MEPA Filings is under construction, and has made significant progress in meeting commitments identified in Draft Section 61 findings by the Proponent, and Final Section 61 Findings issued by state agencies who issued or will issue permits for the Project. This chapter provides a status update of all Project commitments as identified in Section 61 Findings.

#### 5.2 PROJECT MITIGATION MEASURES

#### 5.2.1 SUMMARY OF MITIGATION MEASURES AS DESCRIBED IN THE SSFEIR

Table 5-1 identifies a comprehensive list of mitigation measures for the Project as identified in the SSFEIR, and the current status of those mitigation measures.

Table 5-1: Comprehensive List of Project Mitigation Measures as Identified in the Massachusetts Gaming Commission Section 61 Finding

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule		
Off-site Transportation Improvements – Everett:					
1. Revere Beach Parkway (Route 16)/Mystic View Road/Santilli Highway/Route 99 Connector Improvements (Santilli Circle)	<ul> <li>Modify the approach from         Frontage Road into the         rotary to allow for two         formal lanes.</li> <li>Widen circle at Santilli         Highway approach to allow         for three travel lanes.</li> <li>Provide improved pedestrian         and bicycle connection from         Frontage Road to Mystic         View Road.</li> <li>Reconfigure channelizing         island on south side of rotary         near Mystic View Road.</li> <li>Provide traffic signal         improvements at the         signalized locations around         the traffic circle.</li> </ul>	100% design complete. Roadway Safety Audit complete with a majority of RSA recommendations, particularly short and medium-term recommendations, incorporated into final design.  Agency review ongoing	Prior to opening. Anticipated construction Summer 2017 – Spring 2018		

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule
	<ul> <li>Provide landscaping improvements to the center of the circle.</li> <li>Provide new guide signage and pavement markings.</li> <li>Perform RSA during 25% design.</li> <li>Incorporate RSA recommendations into final design, where feasible.</li> <li>Coordinate with MassDOT to identify funding source for implementation of RSA recommendations.</li> </ul>		
2. Revere Beach Parkway (Route 16)/ Broadway/Main Street (Sweetser Circle)	<ul> <li>Reconstruct circle and approaches to function as a two-lane modern roundabout.</li> <li>Reconfigure the existing Broadway (Route 99) northbound approach to allow for three travel lanes providing free flow access to Route 16 eastbound.</li> <li>Provide shared use path on northwest side of rotary to improve bicycle access.</li> <li>Install new signage to provide direction to bicyclists on how to navigate the rotary safely.</li> <li>Provide landscaping and improvements on the north side of the circle.</li> <li>Maintain pedestrian signal across Route 16 eastbound exit from rotary.</li> </ul>	100% design complete. Agency review ongoing	Prior to opening. Anticipated construction Summer 2017 – Spring 2018
3. Broadway/Beach am Street 4. Broadway/Horiz on Way 5. Broadway/Lynde Street 6. Broadway/ Thorndike Street 7. Bow Street/Mystic Street	<ul> <li>Reconstruct Lower         Broadway as a four-lane         boulevard with turn lanes at         major intersections.</li> <li>Upgrade/replace/install         traffic control signals.</li> <li>Reconstruct sidewalks and         bicycle lanes where         required.</li> <li>Install street trees and         lighting.</li> <li>Improve MBTA bus stops         along Lower Broadway.</li> </ul>	100% design in progress.	Prior to opening. Anticipated construction Summer 2017 – Winter 2018

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule
8. Bow Street/Lynde Street 9. Bow Street/ Thorndike Street 10. Beacham Street/Robin Street 11. Broadway/ Bowdoin Street	<ul> <li>Installation of technology         along Broadway/Alford         Street (Route 99), near         project entrance, to allow for         signal prioritization for         buses.</li> </ul>		
12. Broadway/ Norwood Street/Chelsea Street	<ul> <li>Optimize traffic signal timing, phasing and coordination.</li> </ul>	100% design in progress.	Prior to opening
13. Lower Broadway Truck Route	<ul> <li>Upgrade Robin Street and Dexter Street to serve as a truck route.</li> <li>Provide full depth reconstruction of the existing roadway to accommodate heavy vehicles.</li> <li>Includes reconstruction of Robin Street and Dexter Street to include heavy-duty pavement, corner radii, improvements, sidewalk reconstruction (where present), drainage system modifications (minor), signs and pavement markings.</li> <li>Traffic signal retiming and</li> </ul>	100% design in progress.	Prior to opening. Anticipated construction Summer 2017 – Winter 2018
14. Ferry Street/ Broadway (Route 99)	optimization.	complete. Agency review ongoing	Anticipated construction Summer 2017 – Spring 2018
Off-site Transportation	on Improvements – Medford:		
1. Mystic Valley Parkway (Route 16)/Fellsway (Route 28)/Middlesex Avenue (Wellington Circle)	<ul> <li>Upgrade/replace traffic signal equipment/signs/pavement markings.</li> <li>Optimize traffic signal timing, phasing and coordination.</li> <li>Widen Route 28 northbound to provide an additional left turn lane.</li> <li>Widen Route 16 westbound to provide an additional through lane in the middle of the intersection.</li> </ul>	100% design complete. Agency review ongoing	Prior to opening. Anticipated construction Summer 2017 – Spring 2018

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule
	<ul> <li>Reconstruct non-compliant sidewalks and accessible ramps around the intersection to improve pedestrian access.</li> <li>Provide landscape improvements.</li> </ul>		
2. Mystic Valley Parkway (Route 16)/Route 16 Connector 3. Mystic Valley Parkway (Route 16)/Mystic Avenue	<ul><li>Traffic signal retiming and optimization.</li><li>ADA Improvements.</li></ul>	100% design complete. Agency review ongoing	Prior to opening. Anticipated construction Summer 2017 – Spring 2018
4. Road Safety Audit	<ul> <li>Perform Road Safety Audit at the intersection of Mystic Valley Parkway (Route 16)/Route 16 Connector.</li> </ul>	Completed and incorporated into design.	Complete
5. Wellington Circle Study	<ul> <li>Funding for study of long- term alternatives for reconstruction of Wellington Circle.</li> </ul>	Discussions underway with Medford an d Malden to develop parameters for long- term reconstruction study. Funding to be put in place prior to opening.	Prior to opening
Off-site Transportation	on Improvements - Boston		
1. Alford Street/Main Street/Sever Street/ Cambridge Street (Sullivan Square) 2. Cambridge Street/ I-93 northbound off- ramp	<ul> <li>Optimize signal timing for Maffa Way/ Cambridge         Street; interconnect and coordinate traffic signals, widen the Main Street approach to provide two lanes.</li> <li>Reconstruct busway between Cambridge Street and Maffa Way.</li> <li>Reconstruct the southbound approach of Alford Street at Cambridge Street.</li> <li>Install new traffic signals at Cambridge Street/Spice Street/MBTA Busway and Maffa Way/Busway.         Upgrade/replace traffic signal equipment/signs/pavement markings.</li> </ul>	25% design ongoing as part of Sullivan Square design.	Prior to opening

Subject Matter	Improvement Measure	Current Status	Anticipated Schedule
	<ul> <li>Optimize traffic signal timing, phasing, and coordination.</li> <li>Reconstruct Spice Street and D Street.</li> <li>Reconstruct sidewalks on west side of rotary between Sullivan Square station and Alford Street Bridge.</li> <li>Reconstruct sidewalks and upgrade lighting and streetscape in rotary between Cambridge Street and Main Street (east).</li> <li>Provide bicycle lanes on Cambridge Street.</li> <li>Reconstruct MBTA lower busway and parking area at Sullivan Square station, including new traffic signal at Maffa Way/station entrance.</li> <li>Construct BUS ONLY left-turn lane from Main Street into Sullivan Square Station.</li> </ul>		
3. Traffic Signal Interconnect Conduit from Sullivan Square to Austin Street	<ul> <li>Install conduit, pullboxes, and wiring.</li> </ul>	Design incorporated in Sullivan Square 25% design.	Prior to opening
4. Dexter Street/Alford Street (Route 99)	<ul> <li>Upgrade/replace traffic signal equipment/signs/ pavement markings.</li> <li>Optimize traffic signal timing, phasing, and coordination.</li> </ul>	25% design ongoing.	Prior to opening
5. Rutherford Avenue (Route 99)/Route 1 Ramps	<ul> <li>Optimize traffic signal timing and phasing.</li> </ul>	Design incorporated in Sullivan Square 25% design.	Prior to opening
6. Sullivan Square Landscaping	<ul> <li>Improve landscaping within the rotary at Sullivan Square and immediately north of the rotary adjacent to Rutherford Avenue.</li> </ul>	25% design ongoing.	Prior to opening
7. Long-term Commitment to Sullivan Square	<ul> <li>Provide payments of \$2.5 million per year into the Sullivan Square mitigation fund.</li> </ul>	Planned for Project Opening.	Annually

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule
8. Long-term Commitment – Sullivan Square	Provide payments to the City of Boston for each vehicle above Friday afternoon peak hour projections.	Planned for Project Opening.	Monitor and Report no later than 30 days after the first anniversary of Project opening and for 10 years thereafter.
Off-site Transportation	on Improvements – Revere		
1. Route 16/Route 1A/Route 60 (Bell Circle)	<ul> <li>Upgrade/replace traffic signal equipment/signs/pavement markings</li> <li>Optimize traffic signal timing, phasing and coordination</li> </ul>	100% design complete. Agency review ongoing.	Prior to opening. Construction anticipated Summer 2017 – Spring 2018
Off-site Transportation	on Improvements - Chelsea		
1. Route 16/Washington Avenue	<ul> <li>Upgrade/replace traffic signal equipment/signs/pavement markings</li> <li>Optimize traffic signal timing, phasing and coordination</li> </ul>	100% design complete. Agency review ongoing.	Prior to opening. Construction anticipated Summer 2017 – Spring 2018
2. Route 16/Everett Avenue 3. Route 16/Webster Avenue	<ul> <li>Optimize traffic signal timing, phasing and coordination</li> </ul>	100% design complete. Agency review ongoing.	Prior to opening. Construction anticipated Summer 2017 – Spring 2018
Transportation Dema	nd Management		
Transportation Demand Management	- Membership Fee with a Transportation Management Association	Planned for Project Opening.	At opening and ongoing
	<ul> <li>Employ a designated         Transportation Coordinator for the Project to coordinate efforts, monitor success rates, and manage strategic implementation of traffic reduction programs.     </li> <li>Schedule employee shift beginnings and endings</li> </ul>	Planned for Project Opening.	At opening and ongoing

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule
	<ul> <li>outside specified peak traffic periods.</li> <li>Carpool/vanpool matching programs.</li> <li>Dissemination of promotional materials, including newsletters about TDM program in print at the Project's on-site Transportation Resource Center, and online.</li> </ul>		
	<ul> <li>Patron Orange Line Shuttle Service to Wellington and Malden Center stations.</li> <li>2 Locations, 20 Minute Headways, 20 Hrs./day, 30- 50 passenger vehicles.</li> </ul>	Planned for Project Opening.	At opening and ongoing
	<ul> <li>Employee Shuttle Buses</li> <li>2 Locations, 20 Minute</li> <li>Average Headways, 24</li> <li>Hrs./day.</li> </ul>	Planned for Project Opening.	At opening and ongoing
	<ul> <li>Premium Park &amp; Ride Shuttle Buses</li> <li>3 Locations, 90 Minute Headways, 12 Hrs./day.</li> </ul>	Planned for Project Opening.	At opening and ongoing
	<ul><li>Neighborhood Shuttle</li><li>Buses.</li><li>Continuous Loop, 20 Minute</li><li>Headways, 24 Hrs./day.</li></ul>	Planned for Project Opening.	At opening and ongoing
	- Water shuttle service to the Project Site.	Planned for Project Opening.	At opening and ongoing
	- On-site Full Service MBTA Fare Vending Machine.	Incorporated in Project design.	Prior to opening
	- Participation in the MBTA Corporate Pass Program to the extent practical and as allowable pursuant to commercial tenant lease requirements.	Planned for Project Opening.	At opening and ongoing
	- Electric vehicle charging stations within the proposed parking garage. Annual operating cost of \$166,500.	Incorporated in garage design.	At opening and ongoing

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule
	- Car sharing services in the garage at the Project Site.	Incorporated in garage design.	At opening and ongoing
	- Preferential parking for car/vanpools and alternatively fueled vehicles.	Incorporated in garage design.	At opening and ongoing
	- Offering a "Guaranteed- Ride-Home" in case of emergency to employees that commute to the Project by means other than private automobile.	Planned for Project Opening.	At opening and ongoing
	- Orange Line annual operating subsidy.	Planned for Project Opening.	At opening and ongoing
MBTA Facility Impro	vements		
1. Wellington Station Improvements	- Improvements to MBTA's Wellington Station to accommodate Wynn patron shuttle service at curbside.	60% design ongoing.	Prior to opening Anticipated construction Summer 2017 – Spring 2018
2. Malden Station Improvements	- Improvements to MBTA's Malden Center Station to accommodate Wynn patron shuttle service at curbside.	60% design ongoing.	Prior to opening. Anticipated construction Summer 2017 – Spring 2018
3. MBTA Everett Shops improvement	- Improvements to access and loading docks at MBTA's Everett shops.	In progress. Targeted completion Summer 2017.	Prior to opening
Water Transportation Vessels	The Proponent will provide dock facilities and customized ferry vessels to support passenger water transportation service between the Project Site and key Boston Harbor landing sites.	Dock construction underway. Ferry vessel design in progress.	At opening
Annual Monitoring and Reporting Program	- Post-development traffic and parking monitoring and employee survey program in order to evaluate the adequacy of transportation mitigation measures, including the TDM program.	Planned for Project Opening.	At opening and ongoing

Subject Matter	Improvement Measure	Current Status	Anticipated Schedule
Sullivan Square traffic monitoring	- Post-development motor vehicle traffic counts in Sullivan Square as well as additional locations to determine whether Project- related vehicle trips through Sullivan Square have exceeded projections during the Friday afternoon peak hour.	Planned for Project Opening.	No later than 30 days after the first anniversary of Project opening and annually for 10 years thereafter
On-Site (Non-Transpo	ortation) Improvements		
Wastewater	The Project will provide funding for sewer system improvements to remove Infiltration and Inflow ("I/I") equivalent to 4 gallons removed for every gallon of new wastewater generated; currently estimated at 314,649 gallons per day.  Grease traps and gas/oil separators will be installed.	Coordination with City of Everett ongoing.	During construction
Water Use	The Project will obtain Leadership in Energy and Environmental Design ("LEED") Certification of Gold or higher, and incorporates water conservation measures that are intended to reduce the potable water demand on the MWRA water supply system. The Project will utilize water- efficient plumbing fixtures, low- flow lavatory faucets and showerheads. Through rainwater harvesting, and the installation of alternatives to natural turf landscaping, the Project will further reduce water demand and use. The Project includes extensive indoor and outdoor landscaping. The Project will utilize timers, soil moisture indicators and rainfall sensors to reduce potable water use on landscaping.	On track for LEED Gold, design finalization in process including water use reduction measures.	During construction

Subject Matter	Improvement Measure	<b>Current Status</b>	Anticipated Schedule
Wetlands, Waterways, and Water Quality Certification	The Project will contribute to improved water quality, cleanup and restore of bulkheads and piers, remove trash and litter along the waterfront, and restore and enhance shoreline areas along the Project Site. The Project will also create public access and amenities in currently inaccessible areas of the City of Everett's Central Waterfront.  Wetlands mitigation and enhancement measures include:  On-site  Remediation, revegetation and enhancement of 550 linear feet of existing shoreline with enhanced "living shoreline;"  Removal of invasive vegetation and planting of native herbaceous and shrub vegetation along part of existing Coastal Bank and Riverfront Area;  Transformation of 10,900 +/- SF of disturbed Coastal Beach/Tidal Flats, Coastal Bank, and Riverfront Area to Salt Marsh;  Dredging to provide ample draft for water transportation, recreational vessels and a proposed floating dock;  Debris clean up within the Land Under the Ocean, Coastal Beach and Coastal Bank resource areas;  Replacement of existing bulkhead and construction of new bulkheads within areas of existing degraded Coastal Beach and Coastal Bank areas; and	Land-based remediation ongoing. Shoreline cleanup underway.  Pedestrian and bicycle connection design underway.	During construction and prior to opening

Subject Matter	Improvement Measure	Current Status	Anticipated Schedule
	Substantial public benefits and water-dependent uses along the Project Site's waterfront, transforming the Site into a vibrant and active development by providing:  - High quality open space along the Mystic River - 100% of the ground floor will be Facilities of Public Accommodation - A water transportation dock - A continuous harborwalk along the waterfront		
	Direct bicycle and pedestrian connections to the DCR Gateway Park and to Broadway including construction of a multi-use path, benches, signage, bicycle racks, plantings and lighting		
Public Access	Funding to DCR for planning and engineering services related to an investigation of a potential pedestrian bridge crossing of the Mystic River linking Somerville and Everett	Bridge design RFP in progress, review underway by DCR.	Prior to opening
Stormwater	Implementation of a stormwater management system that will dramatically improve the quality of runoff on-site. including:  On-site  - Two new outfalls will discharge treated stormwater into the Mystic River;  - Green Roof;  - Best Management Practices ("BMPs") including pavement sweeping, deep sump catch basins, four (4) proprietary stormwater separators, and stormwater media filters will be constructed. These BMPs will be designed to remove at least 80 percent of the	Stormwater management system design complete, including outlined Best Management Practices to meet and exceed state requirements.  Stormwater and runoff mitigation measures in place for construction — weekly inspections conducted by on-site Construction Manager to ensure proper implementation of catch basins, silt	Prior to Opening

Subject Matter	Improvement Measure	Current Status	Anticipated Schedule
	average annual load of Total Suspended Solids (TSS); and Catch basins, silt fences, hay bales and crushed stone will be used during construction to prevent sediment from entering runoff.  Off-site Offsite mitigation measures associated with transportation improvements will include bio- retention or subsurface infiltration chambers, deep sump catch basins or proprietary stormwater separators.	fences, hay bales, and crushed stone.  Off-site mitigation measures incorporated into ongoing transportation improvements design.	
Green House Gas Emissions	The Project buildings will be designed to be certifiable under the Green Building Council Leadership in Energy and Environmental Design (LEED) rating of Gold or higher. The Project will be operated utilizing a series of best operating practices consistent with LEED principles to maintain the energy use, water efficiency, atmospheric, materials and resources use, and indoor air quality goals.  The Proponent will provide a self-certification to the MEPA Office regarding compliance with GHG reductions upon completion of construction.	On track for LEED Gold, design finalization in process.	During construction and post occupancy
	The Project will commit to a comprehensive list of Energy Efficiency Measures (EEM) that are predicted to reduce stationary source CO2 emissions for the building by 18.4% relative to ASHRAE 90.1-2010, or for the entire Project Site (including buildings, garage ventilation,		

Subject Matter	Improvement Measure	Current Status	Anticipated Schedule
	and lighting, exterior lighting		Schedule
	and water/wastewater utilities)		
	by 27.4% relative to ASHRAE		
	90.0-2010 standards. Proposed		
	EE measures include:		
	- Install street trees and		
	lighting;		
	- Cool roofs;		
	- Central chiller plant with		
	better efficiency than Code;		
	- Demand Control Ventilation		
	(DCV) for the casino, public		
	entertainment, and retail		
	areas;		
	- Energy Recovery Ventilation		
	(ERV) to reduce chiller		
	energy use;		
	- Building envelopes with		
	roof and window insulation		
	better than Code;		
	- Skylights over the entry		
	atrium and along the retail		
	promenade (daylighting		
	controls will be tied to this		
	extensive system of		
	skylights);		
	- Lower light power density		
	20% better than Code;		
	- At least 80% of total to be		
	Low-energy Electronic		
	Gaming Machines (EGMs);		
	- Metal halide lighting for all		
	parking structures;		
	- High efficiency elevators		
	with regenerative VVVF		
	drives and LED lights;		
	- Demand Control Exhaust		
	Ventilation (DCEV) with		
	variable frequency drive		
	(VFD) fans for enclosed		
	parking structures and		
	metal halide lighting for all		
	parking structures;		
	- Kitchen and restaurant		
	refrigeration energy		
	efficiency design to reduce		
	energy use;		
	- Energy-STAR appliances;		
	- Enhanced building		
	commissioning; and		

C. L. and Adams		Comment Shahara	Anticipated
Subject Matter	Improvement Measure	<b>Current Status</b>	Schedule
	- Occupancy controls for		
	non-occupied or		
	infrequently occupied		
	spaces.		
	7. 5		
	The Project has adopted the		
	following Renewable Energy		
	Measures:		
	Photo voltais (PV) system		
	- Photo-voltaic (PV) system on the podium building		
	roof or other locations,		
	and/or purchase from local		
	service providers of Green		
	Power of annual electric		
	consumption equaling 10%		
	of the Project's annual		
	electrical consumption;		
	Ciccurcuit consumption,		
	- Cogeneration plant using a		
	nominal 1-MW		
	microturbine, providing		
	approximately 20% of the		
	Project's annual electrical		
	consumption and		
	significant amounts of		
	absorption cooling, heat		
	and hot water.		
	Intersection improvements		
	to reduce vehicle idling and		
	Transportation Demand		
	Management measures to		
	reduce trips listed above		
	will reduce Project-related		
	motor vehicle CO <sub>2</sub>		
	emissions by 13.0%. When combined, (stationary		
	source plus transportation),		
	the Project's total CO2		
	emissions reductions are		
	25.7% percent compared to		
	the Base Case.		
	The Project will also plan for		
	and account for the effects of		
	Sea Level Rise by elevating the		
	proposed structures non-service		
	and garage floor elevations to		
	15 to 16 feet above the 100-		
	year flood level. The Project		

Subject Matter	Improvement Measure	Current Status	Anticipated Schedule
	will also incorporate the following design criteria:  - Parking garages entrances and other openings into below grade spaces will be elevated above the 100-year flood level, or will be sufficiently flood proofed to avoid damage from coastal storms, and Critical infrastructure and HVAC equipment will be elevated above projected flood levels.		

# 5.3 ADDITIONAL PROJECT MITIGATION MEASURES

#### 5.3.1 PROJECT CHANGES

The Proponent expects to complete all mitigation measures as identified in Section 5.2. Additional mitigation measures will not be required as a result of Project changes identified in this NPC.

#### 5.3.2 SEDIMENT REMEDIATION

Mitigation measures are expected to be identified and refined as permitting proceeds for the sediment remediation. Those expected mitigation measures are identified in Chapter 4, Sediment Remediation Process, Impacts and Mitigation.



Appendix 1

DISTRIBUTION LIST



# APPENDIX 1: DISTRIBUTION LIST

#### STATE AGENCIES AND GOVERNMENT ORGANIZATIONS

Secretary of Energy and Environmental Affairs Attn: MEPA Office

100 Cambridge Street, Suite 900

Boston, MA 02114

MassDEP

Commissioner's Office

One Winter Street

Boston, MA 02108

MassDEP Northeast Regional Office

Attn: John Fitzgerald 205B Lowell Street

Wilmington, MA 01887

MassDEP, Waterways Program

Attn: Ben Lynch One Winter Street Boston, MA 02108

MassDEP

Attn: Mr. Gary Moran One Winter Street Boston, MA 02108

Massachusetts Historical Commission Attn: Brona Simon, Executive Director

220 Morrissey Boulevard

Boston, MA 02125

Massachusetts Department of Transportation

Neil Boudreau

State Traffic Engineer

Traffic Operations 7th floor

10 Park Plaza

Boston MA 02116

Massachusetts Department of Transportation

Stanley Wood, P.E.

Highway Design Engineer Highway Design, 6<sup>th</sup> floor

10 Park Plaza Boston MA 02116

Massachusetts Department of Transportation

Public Private Development Unit

Attn: Lionel Lucien

Room 4150 Ten Park Plaza

Boston, MA 02116

Massachusetts Department of Transportation

Attn: David J. Mohler, Executive Director

Office of Transportation Planning

Ten Park Plaza, Suite 4160

Boston, MA 02116

MassDOT - Highway Division District #4

Attn: Environmental Reviewer

519 Appleton Street Arlington, MA 02476 Metropolitan Area Planning Council

Attn: Executive Director
60 Temple Place, 6th floor
Boston, MA 02111

Office of Coastal Zone Management Attn: Project Review Coordinator 251 Causeway Street, Suite 800 Boston, MA 02114

Massachusetts Department of Conservation and Recreation Division of Urban Parks Attn: MEPA Coordinator 251 Causeway Street, Suite 600 Boston MA 02114

Massachusetts Department of Conservation and Recreation Attn: Leo Roy, Commissioner 251 Causeway Street, Suite 600 Boston, MA 02114

Massachusetts Division of Marine Fisheries Attn: Tae Evans 251 Causeway Street, Suite 400 Boston, MA 02114

Massachusetts Bay Transportation Authority Attn: Andrew Brennan 10 Park Plaza, 6th Floor Boston, MA 02116-3966 Massachusetts Gaming Commission Attn: John Ziemba 84 State Street, 10th Floor Boston, MA 02109

Board of Underwater Archaeological Resources Attn: Victor T. Mastone, Director 251 Causeway Street, Suite 800 Boston, MA 02114

Massachusetts Department of Energy Resources Attn: MEPA Reviewer 100 Cambridge Street, Suite 1020 Boston, MA 02114

Massachusetts Port Authority Attn: James Doolin, Chief Development Officer One Harborside Drive, Suite 200S East Boston, MA 02128

Massachusetts Water Resources Authority Attn: Marianne Connolly, Senior Program Manager, Environmental Review and Compliance 100 First Avenue Charlestown, MA 02129

#### **CITY OF EVERETT**

Office of the Mayor Attn: Chief of Staff Everett City Hall 484 Broadway, Room 31 Everett, MA 02149

Everett Dept. of Planning & Development Attn: Tony Sousa Everett City Hall 484 Broadway, Room 25 Everett, MA 02149 Everett Conservation Commission Attn: Jon Norton, Chairman Everett City Hall 484 Broadway, Room 40 Everett, MA 02149

Everett Public Health Department Everett City Hall 484 Broadway, Room 20 Everett, MA 02149

Everett Department of City Services Everett City Hall 484 Broadway Everett, MA 02149

#### **OTHER MUNICIPALITIES**

#### City of Boston

Salvatore LaMattina Boston City Councilor 1 City Hall Plaza Boston, MA 02201

Boston Redevelopment Authority Attn: MEPA Reviewer 1 City Hall Plaza Boston, MA 02201

Boston Parks and Recreation Department Attn: Carrie Marsh 1010 Massachusetts Avenue Boston, MA 021 18

Boston Transportation Department Commissioner Gina Fiandaca 1 City Hall Plaza, Room 721 Boston, MA 02201

Boston Environment Department Chief of Environment and Energy 1 City Hall Plaza, Room 603 Boston, MA 02201

Gaming Host Community Advisory
Committee
1 City Hall Plaza
Boston, MA 02201

#### City of Chelsea

City Manager City Hall, Room #302 500 Broadway Chelsea, MA 02150

#### City of Malden

Gary Christenson, Mayor 200 Pleasant Street, Room 627 Malden, MA 02148

#### City of Somerville

Department of Strategic Planning and Community Development Somerville City Hall 93 Highland Avenue Somerville, MA 02143

Mayor Joseph Curtatone Somerville City Hall 93 Highland Avenue Somerville, MA 02143

Bruce M. Desmond, Alderman at Large 220A Summer St. Somerville, MA 02143 617 594-8347

#### City of Medford

Office of Community Development Ci ty Hall, Room 308 85 George P. Hassett Drive Medford, MA 02155

Department of Public Works Attn: Commissioner City Hall, Room 304 85 George P. Hassett Drive Medford, MA 02155 Mayor Michael McGlynn Rooms 202-204, City Hall 85 George P. Hassett Drive Medford, MA 02155

Medford Office of Energy & Environment City Hall Room 205 85 George P. Hassett Drive Medford, MA 02155

City of Medford Police Department Attn: Chief of Police 100 Main Street Medford, Massachusetts 02155

#### City of Revere

City of Medford Fire Department Attn: Chief 120 Main Street Medford, MA 02155 Mayor Brian Arrigo 281 Broadway Revere, MA 02151

Department of Planning and Community Development Attn: Robert O'Brien, Director 281 Broadway Revere, MA 02151

City of Melrose Mayor Robert J. Dolan 562 Main Street Melrose, MA 02176

#### **ELECTED OFFICIALS**

Senator Sal N. DiDomenico State House Room 218 Boston, MA 02133

Representative Wayne A. Matewsky State House Room 540 Boston, MA 02133

Representative Carl M. Sciortino, Jr State House Room 540 Boston, MA 02133

Representative Marjorie Decker State House Room 437 Boston, MA 02133

Representative David M. Rogers State House Room 134 Boston, MA 02133

Representative Timothy J. Toomey State House Room 238 Boston, MA 02133

Representative Daniel Ryan State House Room 148 Boston, MA 02133

Senator Michael Moran State House Room 42 Boston, MA 02133

Representative Adrian Madaro State House Room 544 Boston, MA 02133 Representative Christopher G. Fallon State House Room 236 Boston, MA 02133

Representative Paul A. Brodeur State House Room 43 Boston, MA 02133

Senator Katherine Clark State House Room 410 Boston, MA 02133

Representative Carl M. Sciortino, Jr State House Room 472 Boston, MA 02133

Representative Denise Provost State House Room 473B Boston, MA 02133

Senator Patricia Jehlen State House Room 543 Boston, MA 02133

Congressman Michael E. Capuano 110 First Street Cambridge, MA 02141

Representative Kathi-Anne Reinstein State House Room 481 Boston, MA 02133

Maura Healey Office of the Attorney General One Ashburton Place Boston MA 02108

#### **ORGANIZATIONS**

Bike to the Sea. Inc. Attn: Stephen Winslow 83 Jacob Street Malden, MA 02148

Mass Audubon

Attn: Christina McDermott, Assistant to the Director of Public Policy & Government

Relations

6 Beacon Street, Suite 1025

Boston, MA 02108

Charlestown Mothers Association Attn: Jennifer Rossi, Co-President Jennifer Rossi [jennifer.m.rossi@gmail.com]

Charlestown Waterfront Coalition P.O. Box 290533 Charlestown, Massachusetts 02129

Charlestown Neighborhood Council
Attn: Mark Rosenshein
32 Green Street
Charlestown, MA 02129
markrosenshein@comcast.net

Gardens for Charlestown, Inc. P.O. Box 290044 Charlestown, MA 02129

Columbia Design Group jshipe@columbiadesigngroup.com

Charlestown Preservation Society Design Review Committee P.O. Box 290201 Charlestown, MA 02129 Boston Harbor Alliance jellis@islandalliance.org

Everett Teacher's Association 40 Woodward Street Everett. MA 02149

Mystic River Watershed Association Attn: E K Khalsa, Executive Director 20 Academy Street, Suite 306 Arlington, MA 02476

Rutherford Corridor Improvement Coalition Attn: William P. Lamb rcic@rcic-charlestown.org

Boston Harbor Now Attn: Kathy Abbott, President 15 State Street Boston, MA 02109

WalkBoston Attn: Wendy Landman, Executive Director 45 School Street Boston, MA 02108

Friends of City Square Park
Attn: Annette Tecce
P.O Box 290635
Charlestown, MA 02129
Massachusetts Oyster Project

DDR Corp.
Jim Grafmeyer
3300 Enterprise Parkway
Beachwood, OH 44122

East Coast Greenway Alliance Molly Henry 5315 Highgate Dr. Suite 105 Durham, NC 27713

Somerville Bicycle Advisory Committee Alex Epstein 93 Highland Avenue Somerville, MA 02143

Melrose Pedestrian and Bicycle Advisory Committee Steve Leibman melrosepedbike@gmail.com

Rutherford Avenue/Sullivan Square Advocacy Group P.O. Box 290535 Charlestown, MA 02129

Livable Streets Alliance 70 Pacific Street Cambridge, MA 02139 Massachusetts Institute of Technology (MIT)
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Fred Salvucci
77 Massachusetts Avenue
Cambridge, MA 0213

Charleston Lofts Condominium Trust c/o First Realty Management Corp. 151 Tremont Street Boston, MA 02111

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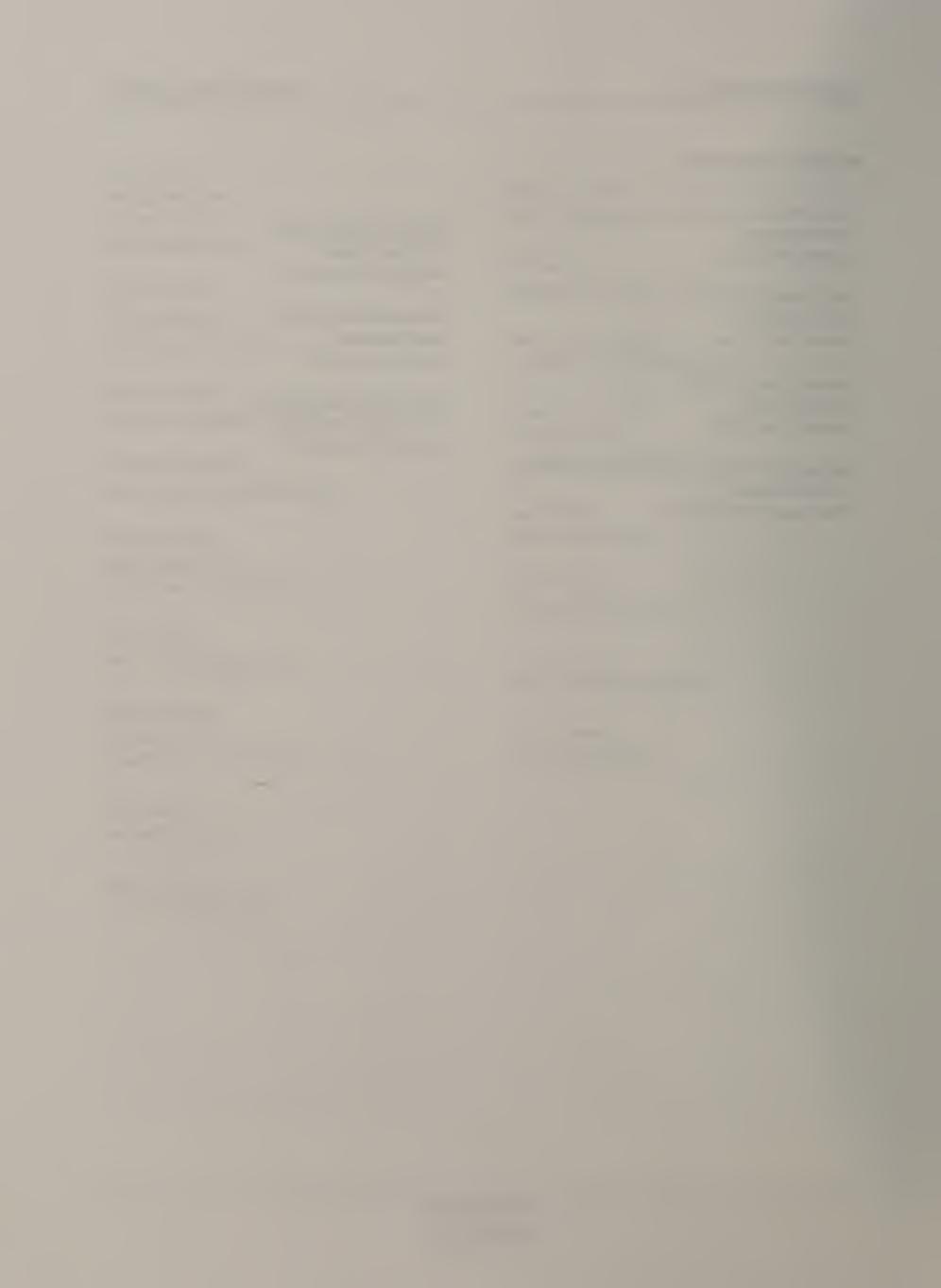
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Appendix 2

SECRETARY'S CERTIFICATE
ON THE SSFEIR





The Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs

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Matthew A. Beaton SECRETARY

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August 28, 2015

# CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE SECOND SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Wynn Everett

PROJECT MUNICIPALITY : Everett

PROJECT WATERSHED : Boston Harbor

EEA NUMBER : 15060

PROJECT PROPONENT : Wynn MA, LLC
DATE NOTICED IN MONITOR : July 22, 2015

As Secretary of Energy and Environmental Affairs, I hereby determine that the Second Supplemental Final Environmental Impact Report (SSFEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00). The SSFEIR is responsive to the Scope identified in the Certificate on the SFEIR which was limited to five issues. The Proponent adequately addressed these issues. Outstanding aspects of the project that require additional analysis can be addressed during local, State and federal permitting, review and approval processes. This finding of adequacy will initiate more detailed review of environmental and transportation issues by the permitting agencies. The subsequent review, permitting and approval processes will build on the foundations established during MEPA review and will provide additional, meaningful opportunities for public review and comment.

Traffic impacts have been a primary concern in the MEPA review of each of the proposed casino projects. The Proponent has made significant commitments to minimize and mitigate traffic impacts. The Proponent has also agreed to provide an annual operating subsidy to the MBTA to mitigate impacts on the Orange Line. The subsidy will amount to approximately \$7.4 million over a 15-year period. This is an unprecedented commitment that acknowledges and addresses the project's impact on transit operations.

As evidenced in its many comments through this process, most recently on the SSFEIR, the Massachusetts Department of Transportation (MassDOT) has reviewed the Proponent's traffic analysis and mitigation plans and determined, consistent with long established review protocols, that it will be effective to mitigate the project's impacts on existing transportation infrastructure. The Metropolitan Area Planning Council (MAPC) reached the same conclusion after its review of this project.

Concerns regarding the long-term traffic impacts of this project and other planned developments are warranted by, in particular, the longstanding congestion of Sullivan Square. I have given serious consideration to requests to require the Proponent and MassDOT to undertake additional planning through MEPA review and whether it would be consistent with the purpose and goals of MEPA review.

The purpose of MEPA is to provide meaningful opportunities for public review of the potential environmental impacts of Projects for which Agency Action is required, and to assist each Agency in using (in addition to applying any other applicable statutory and regulatory standards and requirements) all feasible means to avoid Damage to the Environment or, to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable. MEPA review is intended to inform the Proponent and State Agencies of a project's potential environmental impacts, maximize consistency between Agency Actions, and facilitate coordination of environmental and development review and permitting processes of the Commonwealth. Furthermore, I note that MEPA review is an iterative process that begins with a scope of study for an EIR. Issues are narrowed through review of the EIR and subsequent documents; the scope is not revisited or reopened in subsequent documents. A particularly important part of the scope for many development projects is the identification of the traffic study and associated methodology. The MEPA process includes the preparation of separate Section 61 Findings by each State Agency with permitting authority over the project.

Typical MEPA review of projects subject to an EIR requirement consists of review of an ENF, a Draft EIR, and a Final EIR. The environmental review of this project has extended over two years and included filing of an ENF, Draft EIR, Final EIR, a Supplemental Final EIR and a Second Supplemental Final EIR. Each of these documents have been subject to public review. Numerous and voluminous comments have been received from State Agencies, elected officials, municipalities, and citizens and each of these comments has been considered and reviewed.

I have concluded that the practical, rational and effective approach to addressing broader regional transportation impacts for this project is through enhanced transportation planning processes, not through the prism of this single project. In completing MEPA review, I am requiring enhanced public participation during permitting and development of Section 61 Findings by MassDOT and the establishment of a Regional Working Group. The Regional Working Group will be led by MassDOT and its purpose will be to assess and develop long-term transportation improvements that can support sustainable redevelopment and economic growth in and around Sullivan Square. Wynn Everett has committed to participate in this Regional Working Group and provide a proportionate share of funding to support this effort.

In concluding MEPA review, I am requiring enhanced public review during permitting and development of Section 61 Findings and the establishment of a Regional Working Group. There are aspects of the Wynn Everett project and its mitigation that do require additional analysis and will be subject to further scrutiny during development of Final Section 61 Findings and permitting by MassDOT and the Massachusetts Gaming Commission (MGC). In consultation with Secretary Pollack, I am directing MassDOT to complete the following process:

#### MassDOT Issuance of its Section 61 Findings and Vehicular Access Permit

- MassDOT will revise the draft Section 61 Findings based on consultation with the Proponent and other stakeholders
- MassDOT and the Proponent will identify the Proponent's financial contribution to the Regional Working Group
- Revised draft Scction 61 Findings will be published in the Environmental Monitor for public review and comment. The Proponent will concurrently publish their financial commitment to the Regional Working Group. This will include a 15-day comment period.
- Within two weeks of the close of the comment period, MassDOT will hold a public meeting to review comments and accept additional public comments.
- Within 40 days of the publication of the revised Section 61 Findings in the Environmental Monitor, MassDOT will publish Final Section 61 Findings in the Environmental Monitor.
- MassDOT will address and resolve the following issues:
  - demonstrate feasibility and constructability of proposed improvements for Sullivan Square, including control of necessary right-of-way, carefully review intersection improvements around and within Sullivan Square to minimize queuing and confirm that vehicular storage capacity is adequate, and evaluate safety of proposed right-on-red traffic movements.
  - consult with DCR regarding Mystic Valley Parkway to minimize queuing and confirm that vehicular storage capacity is adequate.

#### MGC Issuance of its Section 61 Findings

- Consider and revise, as appropriate, its draft Section 61 Findings included in the SSFEIR.
- MGC Section 61 Findings shall include or include by reference the Section 61 Findings from all other State Agencies including, but not limited to, MassDOT's Section 61 Findings.
- A consultant hired by the MGC will make a public presentation at a MGC meeting and provide recommendations regarding additional conditions that should be added to the draft Section 61 Findings.
- MGC will solicit written comments on the draft Section 61 Findings and will hold a public hearing. The draft Section 61 Findings and the consultants' report(s) will be posted on the MGC website.

- Final Section 61 Findings will be incorporated into the Gaming License and will be filed with the MEPA Office.
- Compliance with the Section 61 Findings and the conditions of the Gaming License will be part of a regular quarterly review conducted by the MGC.

In addition, I note that the Reopener Provisions of the conditional Gaming Licensc (Section 2 condition 32) indicates that the City of Boston can reopen negotiations for Surrounding Community Status any time prior to opening of the gaming establishment and the MGC has the authority to amend and modify mitigation as appropriate.

## Regional Working Group

Establishment of the Regional Working Group will proceed on a separate and distinct track and will include significant opportunities for consultation, public review and comment. The Regional Working Group will be led by MassDOT. To be productive, the effort will require the active and constructive participation of stakeholders, including the Executive Office of Housing and Economic Development (EOHED), MAPC, DCR and municipalities including, but not limited to, the cities of Boston, Everett, and Somerville. In addition, large employers and developers have an important role to play.

MassDOT will outline the process and schedule and work with stakeholders to identify goals and objectives of the Working Group. At a minimum, the Working Group will:

- assess existing conditions, planned improvements and reviewed and permitted development
- identify planned development and potential build-out
- identify critical infrastructure and study alternatives
- consider funding resources and equitable allocation of project costs

#### **Project Description**

As described in the SSFEIR, the project consists of the redevelopment of a 33.9-acre site in Everett as a destination resort casino. The site is located on Horizon Way and Lower Broadway (Rt. 99) in Everett. Chapter 194 of the Acts of 2011: An Act Establishing Expanded Gaming in the Commonwealth and M.G.L. Chapter 23K, Section 19, as amended by Section 16 of the Expanded Gaming Act, authorizes the Massachusetts Gaming Commission (MGC) to license three casinos. The Act identifies three regions of the state - Region A (Suffolk, Middlesex, Essex, Norfolk and Worcester counties), Region B (Hampshire, Hampden, Franklin and Berkshire counties) and Region C (Bristol, Plymouth, Nantucket, Dukes and Barnstable counties) – and authorizes MGC to permit one casino in each region. This project is located in Region A.

The project will include a total of 3,096,700 square foot (sf), comprised of the following:

- A gaming facility with 4,580 total gaming positions
- A hotel tower, 386-foot high, with 629-rooms (621,774 sf)
- Retail space (52,632sf)
- Food and beverage space (54,680 sf)
- Lobbies, lounge, and an atrium garden (front-of-house) (58,548 sf)
- Back-of-House (411,058 sf)
- A spa and gym (15,405 sf)
- Convention/meeting rooms (37,068 sf)

The project will include 2,930 parking spaces on-site and 800 parking spaces off-site for employee parking. The project includes construction of a parking structure below the Casino Level (including under the retail portion of the Project), with three below-grade levels and one at-grade level to provide self-serve and valet parking spaces for patrons for a total of 1,627,751 sf. The Proponent will provide shuttle service to and from the Project Site. Employee parking will located at existing parking facilities or newly constructed lots.

The project includes remediation and restoration of the site. The proposed shoreline work includes the installation of a vertical steel pile bulkhead, the placement of stone revetments and the installation of pile-supported walkways, the removal of abandoned and deteriorated structures and remnants, salt marsh restoration and re-vegetation of the shoreline. The waterside work includes the dredging of approximately 15,000 cubic yards (cy) of sediment over approximately 41,480 sf to provide an adequate water depth of six feet below mean low water (MLW) to accommodate water transportation vessels. Coastal bank and salt marsh restoration is proposed within a 69,000 sf area landward of high tide at the southwestern edge of the site. Connections from the harborwalk on the Project Site via a new pedestrian and bicycle path under the MBTA right-of-way are proposed.

Primary access to the site will be provided via a new signalized intersection on Route 99 on land acquired from the MBTA. A secondary access for deliveries and employees will be provided via a service road that would follow the periphery of the MBTA Everett Shops property and connect with Route 99 across from Beacham Street in Everett.

#### **Project Site**

The 33.9-acre site is located in Everett adjacent to the Mystic River. Approximately 25.6 acres are upland, surrounded by shoreline and the remnants of marine structures, and approximately 8.3 acres are located below mean high water (MHW) on the Mystic River. The site includes approximately 1,600 lf of shoreline along flowed tidelands. A small area of the site is used as a materials storage yard and includes a 5,200 sf construction trailer/office. Historic uses include the Monsanto chemical manufacturing facility. The site is classified as a disposal site subject to Massachusetts General Law Chapter 21E (MGL c.21E) and the Massachusetts Contingency Plan (MCP). It is contaminated and contains very high levels of arsenic and lead, both in soil and groundwater. Contaminated sediments have also been identified in the area of the site within the Mystic River.

The site is bordered to the west by the tracks of the MBTA Newburyport commuter rail line. The upland portions of the site are bounded by Horizon Way, Rt. 99, and commercial and institutional properties. Most of the soils on the site are disturbed and comprised of fill material. Along the shoreline is a mix of deteriorated stone seawalls, loose gravel and boulders, and rotted timber piers and pilings. The shallower portions of the shoreline also contain debris and remnants of timber structures.

Access to the site is via Horizon Way which forms an unsignalized intersection with Broadway (Rt. 99) in Everett. The site is located in an urban, commercial/industrial area that suffered from economic disinvestment during the latter part of the twentieth century when manufacturing, import and fishery activities declined. Surrounding land uses are primarily commercial/retail, with local businesses (e.g. an auto dealership, chain restaurants, and an auto repair shop) and infill residential structures nearby. Proximate uses include Boston Water and Sewer Commission (BWSC) and Massachusetts Water Resources Authority (MWRA) properties, the MBTA's maintenance facility (Everett Shops) to the north, and the Gateway Center and Gateway Park to the west. The Department of Conservation and Recreation (DCR) owns and operates parkways in the vicinity of the site, including Revere Beach Parkway, the Fellsway and Mystic Valley Parkway. In addition, DCR owns and operates the Mystic River Reservation and the Amelia Earhart dam, a flood control structure located on the Mystic River in the vicinity of the site.

The site is bordered by the Mystic River to the south and an embayment to the east. The embayment is approximately 350 to 500 feet wide from shoreline to shoreline (from the Project area to the upland east of the embayment containing the operations of the MWRA and BWSC). The embayment contains a former channel which was reportedly constructed in the mid-1800s. Records indicate the channel to be about 1,000 feet long with a width of 100 feet, and an original draft of 20 feet below MLW. The channel flares out at the northern end to about 250 feet wide. The channel has since shoaled, and the present depth does not exceed 13 feet below the MLW mark. Waters adjacent to the channel are shallower than the central portion of the channel. The eastern side of the embayment is a mud flat with surface grades from the MLW mark to about three feet above it. The mud flat contains a variety of debris, including several abandoned timber barges.

#### **Procedural History**

Previous review documents submitted to MEPA, including the FEIR, addressed a wide range of environmental issues. The Proponent has made significant commitments to avoid, minimize and mitigate potential environmental impacts including: redevelopment and remediation of a brownfield site located in close proximity to transit, provision of 7.42 acres of open space, creation of access to and along the Mystic River including extension of a multi-use path to Gateway Park, and salt marsh restoration. The Certificate on the FEIR required the Proponent to file a Supplemental FEIR (SFEIR). The Scope was limited to traffic and transportation issues, Responses to Comments and revised Section 61 Findings. The Certificate on the FEIR indicated that other issues had been adequately addressed in the FEIR or could be addressed through subsequent review, approval and permitting processes.

Prior to filing the Supplemental FEIR (SFEIR), the Proponent revised its design based on direction from the MGC. The SFEIR identified changes to the project and associated changes in environmental impacts. The primary changes were the addition of 58,005 square feet (sf) to the size of the building, the addition of 125 hotel rooms (from 504 to 629) and the addition of 420 gaming positions (from 4,160 to 4,580).

The SFEIR provided a revised and updated traffic impact assessment (TIA) which reflected the productive consultation between MassDOT and the Proponent. It included updated traffic counts, improved modeling, and better defined mitigation. It included a revised analysis of the project's impacts on the Orange Line and existing bus service and changes to the private shuttle system to complement existing transit service.

Throughout the review of many projects vying for a Gaming License, the MEPA Office and MassDOT have made a concerted effort to provide clear and consistent information regarding potential environmental and transportation impacts to inform decisions by MGC, municipalities and residents. The methodology for the transportation analysis included in the SFEIR was consistent with that which was required of each of the Casino proposals, including MGM Springfield (EEA #15033), Project First Light (EEA #15159) and the proposed Mohegan Sun project in Revere (EEA #15006).

While the SFEIR represented significant progress in identifying traffic and transportation impacts, a SSFEIR was required to address outstanding traffic and transportation issues, including the violation of the MEPA statute associated with the conveyance of land by MassDOT/MBTA to the Proponent. This transfer occurred prior to completion of MEPA review. None of the documents associated with the land transfer, including the deed, contained any terms, such as a condition or restriction, to provide that the land transfer would be deemed not to have taken place until MEPA review was complete and that the MBTA would reconsider and confirm or modify the Agency Action and any conditions thereof to ensure consistency with MEPA.

#### Gaming Legislation and Massachusetts Gaming Commission Process

The MGC issued a Category 1 gaming license to the Proponent, effective November 18, 2014, pursuant to Chapter 194 of the Acts of 2011: An Act Establishing Expanded Gaming in the Commonwealth and M.G.L. Chapter 23K, Section 19, as amended by Section 16 of the Expanded Gaming Act. The license was issued after the submission of the FEIR and the Certificate on the FEIR (dated August 15, 2014). Conditions of the license include completion of the MEPA review process. Upon completion of the MEPA process, the Gaming Commission will issue Final Section 61 Findings in conjunction with the Gaming License.

The MEPA regulations do not consider Agency Action final if the Permit, contract or other relevant document approving or allowing the Agency Action contains terms such as a condition or restriction that provides that such Agency Action shall be deemed not to have taken place until MEPA review is complete, provided that the Agency shall reconsider and confirm or

modify the Agency Action and any conditions thereof following completion of MEPA review (301 CMR 11.02, Agency Action (c)).

A Host Community Agreement (HCA) was executed with the City of Everett on April 19, 2013. It was approved by the citizens of Everett pursuant to a referendum held on June 22, 2013, in accordance with the Gaming Act. It indicates that the Project will provide 4,000 construction jobs and 4,000 permanent jobs, improve and expand infrastructure, and support a myriad of community programs and services. The HCA identifies the following payments to the City of Everett: \$30 million for capital improvements; \$20 million annual PILOT payments; \$5 million annual community impact fee; and, \$250,000 annual contribution to the Everett Citizens Foundation.

The Proponent entered into Surrounding Community Agreements (SCA) with the City of Malden (November 12, 2013), the City of Medford (April 11, 2014), the City of Cambridge (April 22, 2014), the City of Somerville (June 12, 2014), and the City of Chelsea (June 9, 2014). The Proponent entered into Neighboring Community Agreements with the City of Lynn and the City of Melrose on January 28, 2014.

The Proponent designated the City of Boston as a Surrounding Community. The City of Boston requested that it be identified as a host community; however, the MGC determined that it did not meet the criteria for a host community. The City of Boston declined to participate in the arbitration process for a Surrounding Community established pursuant to the terms of the Gaming Act, thereby relinquishing its designation. As a result, the Proponent agreed to certain specified conditions in the Gaming License for the purpose of mitigating any adverse impacts to the City of Boston and, in particular, the Charlestown neighborhood. The conditions set forth in the Gaming License include a one-time, pre-opening payment by the Proponent of \$1,000,000. Per the Gaming License, this payment can be used to support Charlestown's non-profit organizations, parks, after-school activities, senior programs, job training programs, cultural events and related activities. On January 6, 2015, the Proponent delivered this initial payment to the MGC because the City of Boston's refused to accept the payment. The MGC continues to hold this payment in escrow for the City of Boston's benefit. Following the opening of the Project, the Proponent has agreed to annual payments to the City of Boston in the amount of \$1,600,000, adjusted annually to reflect increases in the Consumer Price Index.

In addition to the specific agreements noted above, the Expanded Gaming Act establishes a Community Mitigation Fund, which is administered by the MGC. Monies from the Community Mitigation Fund shall be used to:

... assist the host community and surrounding communities in offsetting costs related to the construction and operation of a gaming establishment including, but not limited to, communities and water and sewer districts in the vicinity of the gaming establishment, local and regional education, transportation, infrastructure, housing, environmental and public safety, including the office of the county district attorney, police, fire, and emergency services (M.G.L. Chapter 23K, Section 61(b)).

I note that the Expanded Gaming Act requires the establishment of a Subcommittee on Community Mitigation consisting of 12 members, including, but not limited to, representatives from each Region's Host Community, local chambers of commerce, the Department of Revenue's Division of Local Services, the MGC, the Massachusetts Municipal Association, and an appointee of the Governor. Among other responsibilities, this subcommittee will develop recommendations to be considered by the MGC regarding how funds may be expended from the Community Mitigation Fund (M.G.L. Chapter 23K, Section 68(b)). Furthermore, each Region may establish a local Community Mitigation Advisory Committee, which shall include no fewer than six members, to provide information and develop recommendations for the Subcommittee on Community Mitigation, including ways in which funds may be expended from the Community Mitigation Fund. This local committee will include members appointed by Host and Surrounding Communities, the regional planning agency, and the MGC to represent chambers of commerce, regional economic development, and human service providers. (M.G.L. Chapter 23K, Section 68(e)).

MEPA jurisdiction is limited to the subject matter of required or potentially required State Agency Actions, except in the case of a project proposed by a State Agency or receiving State Financial Assistance. In that case, broad scope jurisdiction applies and extends to all aspects of a Project that are likely, directly or indirectly, to cause Damage to the Environment, as defined in the MEPA regulations. In some instances the subject matter of the Agency Action is sufficiently broad (e.g. a Chapter 91 License, Energy Facilities Siting Board review) such that it is functionally equivalent to broad scope jurisdiction. That is the case with the Gaming License which addresses a broad range of environmental issues - sustainability, energy efficiency, renewable energy, and traffic - and extends to mitigation of environmental impacts on host and surrounding communities.

### Permits and Jurisdiction

The project is subject to MEPA review and requires the preparation of a Mandatory EIR pursuant to 301 CMR 11.03(1)(a)(2), 11.03(3)(a)(5), 11.03(6)(a)(6) and 11.03(6)(a)(7) because it requires State Agency Actions and it will create 10 or more acres of impervious area, create a New non-water dependent use occupying one or more acres of waterways or tidelands, generate 3,000 or more New adt on roadways providing access to a single location, and provide 1,000 or more New parking spaces at a single location

The project requires a Category 1 Gaming License from the MGC, a Vehicular Access Permit from the Massachusetts Department of Transportation (MassDOT), a land transfer from the MBTA, a Construction and Access Permit from DCR, and Airspace Review by the Massachusetts Aeronautics Commission (MAC). It requires a Sewer Use Discharge Permit (or waiver) from the MWRA and may also require a 8(M) Permit from MWRA. It requires a Chapter 91 (c.91) License and a 401 Water Quality Certification (WQC) from the Massachusetts Department of Environmental Protection (MassDEP) and it may also require an Air Plan Approval from MassDEP. Transportation mitigation may require review and approval by Massport. It may require Federal Consistency Review by Coastal Zone Management (CZM). The project is subject to the May 5, 2010 MEPA GHG Emission Policy and Protocol (GHG Policy).

The project is not subject to the enhanced analysis provisions of the EEA Environmental Justice (EJ) Policy. The project is located in and adjacent to communities with designated EJ populations; however, the project does not exceed the MEPA thresholds for solid waste or air quality that trigger a requirement for enhanced analysis.

It will require multiple permits and approvals from the City of Everett, including an Order of Conditions from the Everett Conservation Commission (or a Superseding Order of Conditions (SOC) from MassDEP if the local Order is appealed). It will require approvals from the City of Boston Transportation Department and the Public Improvements Commission (PIC) for off-site roadway improvements.

The project requires a Section 404 Clean Water Act Permit and a Section 10 Permit from the United States Army Corps of Engineers (ACOE). In addition, the project may require approval from the Federal Highway Administration (FHWA) for modifications to the highway system (I-93) and/or for work on the National Highway System (NHS). As a result, the project may be subject to review pursuant to the National Environmental Policy Act (NEPA) and review pursuant to Section 106 of the National Historic Preservation Act (NHPA). The project also requires a Part 77 Airspace Review from the Federal Aviation Administration (FAA) and a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the United States Environmental Protection Agency (EPA) for stormwater discharges from a construction site of over one acre.

MEPA jurisdiction is limited to the subject matter of required or potentially required permits; however, the subject matter of the Gaming License confers broad scope jurisdiction and extends to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

### Project Changes Since the Filing of the SFEIR

The SSFEIR identifies changes to the project since the filing of the SFEIR. Changes include an increase in the elevation of the finish floors and elimination of one full level of below-grade parking. The elimination of the parking level will reduce the amount of excavation and flood proofing required for the structured parking. The adjusted floor plans will now reflect a first level floor elevation of 25 NAVD88 at the main entrance for the gaming, restaurant and retail portions of the Project, with the convention space set at elevation 24 NAVD88. Adjustments have also been made to accommodate the transitions between the building and open space areas and the Harborwalk. The Harborwalk and other open space remain at elevations proposed in the SFEIR (approximately 10.3 NAVD88 and up to 12.5 NAVD88, respectively). Garage floor elevations will be set at elevation -4 NAVD88 (level B-3), elevation 4.0 NAVD88 (level B-2) and elevation 13 NAVD88 (level B-1). All publicly accessible areas will be ADA compliant.

As required by the SSFEIR Scope, the Proponent reconsidered parking demand. The review included reconsideration of projected parking demand, utilization of off-site parking for employees and the integration of the Project into the existing and expanded public transportation opportunities that will be available to patrons, guests and employees of the resort. As a result of

this evaluation, the on-site parking supply has been reduced from 3,400 spaces to 2,930 spaces. The SSFEIR indicates that this will accommodate the projected demand for parking at the resort (2,360 spaces) with a reserve capacity to accommodate potential parking demand fluctuations. No changes are proposed to the use of offsite parking for employees. The Proponent will lease up to 800 spaces at three (3) off-site facilities; on-site employee parking will be limited to a small number of spaces for Wynn executives and employees with disabilities.

## **Environmental Impacts and Mitigation**

Potential environmental impacts are associated with the creation of 19.42 acres of impervious surfaces; alteration of wetland resource areas; water demand of 311,830 gallons per day (gpd); and, generation of 283,482 gpd of wastewater. The project will generate approximately 31,844 new (unadjusted) adt and 37,916 new (unadjusted) adt on a Saturday. When adjusted for mode share, the project is estimated to generate approximately 20,130 adt on a weekday and 23,982 adt on a Saturday. As noted above, parking has been decreased to 2,930 on-site parking spaces. The project will include 800 off-site parking spaces for employee parking.

The waterside work includes the dredging of approximately 15,000 cubic yards (cy) of sediment over approximately 41,480 sf to provide an adequate water depth of six feet below mean low water (MLW) to accommodate water transportation vessels. Impacts to coastal bank are estimated at 41,480 sf.

Measures to avoid, minimize and mitigate impacts include redevelopment and remediation of a brownfield site located in proximity to transit, provision of 7.42 acres of open space, access to and along the Mystic River including a connection to Gateway Park, salt marsh restoration and replication of shellfish beds, installation of a stormwater management system, roadway improvements, and improvements to transit, bike and pedestrian access. The building will be designed to be certifiable by the US Green Building Council's Leadership in Environmental and Energy Design (LEED) at the Gold level, or higher. The project incorporates measures to improve energy efficiency including use of a Combined Heat and Power (CHP) system. In addition, it includes a commitment to install a PV system and/or purchase Green Power from local service providers (equal to 10% of the Project's annual electrical consumption).

### Review of the SSFEIR

The SSFEIR included an updated project description and associated plans. The SSFEIR included an updated Transportation Impact Analysis (TIA), revised mitigation based on additional analysis and comment letters, and provided conceptual plans for proposed improvements. The SSFEIR included a separate chapter summarizing proposed mitigation measures and included draft Section 61 Findings for each State Agency that will issue permits for the project.

The Scope for the SSFEIR was limited to the following:

- 1. Provide an explanation of and remedy for the premature conveyance of land from MassDOT/MBTA and its acceptance by the Proponent prior to the completion of MEPA review.
- 2. Commit to a specific dollar amount for an annual operating subsidy to the MBTA to support service and capacity improvements on the Orange Line.
- 3. Clarification of the Traffic Impact Assessment and supplemental data and analysis.
- 4. Provide revised Draft Section 61 Findings that incorporate commitments associated with the three requirements listed above.
- 5. Response to Comments document that provides clear and specific responses to issues.

## MBTA Land Transfer

As noted previously, the MBTA prematurely conveyed land associated with the Everett Shops facility to the Proponent in February 2015 prior to the completion of MEPA review. MassDOT has acknowledged and has taken responsibility for the premature conveyance of the land which constituted a violation of the MEPA statute. To remedy the premature conveyance of the land, MassDOT/MBTA and the Proponent placed the subject property and the associated payment into escrow. The escrow agreement provides that the conveyance of the property shall be deemed to not have taken place unless and until a Certificate finding the final MEPA review document adequate is issued. Upon completion of the MEPA review process, MassDOT/MBTA will issue Final Section 61 Findings which may include modifications or addition of conditions to the draft Section 61 Findings. Upon issuance of Final Section 61 Findings, the escrow agent will return the Quitclaim Deed and Termination of Easement Agreement to the Proponent, the money to the MBTA, and any associated modifications will be recorded.

The SSFEIR includes a description of the parcels subject to the Land Transfer and their relationship to the overall development supported by existing and proposed conditions plan. It describes the infrastructure and operations associated with the Everett Shops. The SSFEIR identifies issues that the MBTA has highlighted as critical to ongoing operations, including protecting the 24-hour nature of the facility, providing sufficient access and internal circulation, and measures to avoid future conflicts between maintenance activities and the casino and hotel. The SSFEIR describes the public bidding process and the sale of the land and provides supporting documentation in the Appendices including the Notice of Proposal and Request for Response, Offer Letter, Notification of Successful Bidder Letter from MBTA to Wynn, Quitclaim Deed, Easement Agreement, and Closing Statement.

The SSFEIR indicates that the Proponent engaged in numerous discussions with the MBTA, over a two-year period, regarding acquisition of a portion of the MBTA Everett Shops. The MBTA Everett Shops property is one of two train and bus repair facilities available to support the needs of all MBTA divisions and departments. It serves as the train repair facility for four MBTA Heavy and Light Rail Subway lines and the 1000 bus fleet. Alternatives considered ranged from acquisition of approximately 0.5 acres to acquisition of the entire property.

Approximately 1.76 acres, consisting of 3 parcels, was conveyed to the Proponent. Parcel 1 is a 22,511 square feet (0.517 acres) triangular parcel located in the southeast corner of the property. Parcel 2 is a 30,753 square feet (0.706 acres) rectangular parcel running along the northwest edge of the property. Parcel 3 is a 23,330 square feet (0.535 acres) rectangular parcel running along the northwest edge of the MBTA parcel.

The SSFEIR includes analysis of the potential impact of the transfer on MBTA operations, including illustration of vehicular access and movements throughout the site. It describes consultation with MBTA operations and technical staff, including Everett Shops staff, to address potential impacts and changes to the facility's entrance prior to conveyance of the land. Measures to avoid, minimize and mitigate impacts include a signalized entrance and exit on Broadway (Route 99), as well as turning lanes, a layover area, and a new gate/processing facility. The main gatehouse to the Everett Shops will be relocated to the north opposite Beacham Street. The layover facility consists of a 10-foot wide, 60-foot long area along the driveway's eastbound approach to the gatehouse.

MassDOT comments indicate that it is satisfied that the sale will not impact MBTA operations on the site. As directed, the Proponent has provided separate draft Section 61 Findings for MassDOT (i.e. Vehicular Access Permit) and the MBTA (i.e. Land Transfer). These Section 61 Findings will be finalized during permitting, any associated modifications to the sale will be recorded, and copies of the Section 61 Findings will be filed with the MEPA Office.

# **Transit Subsidy**

The MBTA's Orange Line is a key component of the Project's transportation strategy to maximize patron and employee use of non-automobile travel modes. A significant proportion of patrons and employees are expected to travel on the Orange Line. Frequent shuttle bus service is proposed by the Proponent from Wellington and Malden Center stations. The project includes improvements to Sullivan Square, Wellington and Assembly Square stations to facilitate and encourage Orange Line usage and to improve circulation for all vehicles at the stations. In addition, employees and patrons can make connections from Sullivan Square Station to one of several MBTA bus routes servicing Lower Broadway (Route 99). As required, the SSFEIR includes a commitment to an annual operating subsidy, identifies the amount of the subsidy and how the amount was determined, and identifies how the funds will be managed and used. This subsidy is necessary to preserve the service and capacity improvements associated with the addition of new Orange Line trains and to mitigate project impacts.

The SSFEIR includes an updated analysis of projected Orange Line peak loads for weekday and weekend service days between the Wellington and Back Bay Stations. This analysis was developed in consultation with MassDOT and the MBTA and, at the direction of the MBTA, is structured on the MBTA Service Delivery Policy. The analysis compares existing Orange Line operations, future operations (2023) including general ridership growth, and future operations (2023) with the addition of project trips. The Service Delivery Policy quantifies the vehicle loading that the MBTA seeks to achieve by time of day and by location (core or non-core). Core-area stations are defined as heavily traveled areas and include stations between Back

Bay and North Station (inclusive). Non-core stations are outside of downtown Boston and include stations located north of North Station or south of Back Bay station.

The projections demonstrate that increased demand would add a significant number of employees and casino patrons to the transit system during some peak periods. The subsidy is based, in part, on costs of additional operational capacity necessary to offset project-related deterioration in service. The Proponent will fund additional service where the level-of-service (LOS) in the Build Condition is projected to be below the LOS in the No Build Condition, unless the Orange Line has existing capacity to handle the increased trips.

The analysis identified four times of the week in the Build Condition when the Orange Line would be over capacity. It indicates that the annual cost to run additional service necessary to mitigate this condition is \$382,200. The revenue that is assumed for this service based upon the additional passengers added to the Orange Line by Wynn patrons and/or employees is \$110,500 resulting in an annual subsidy of \$271,700. The Proponent has agreed to subsidize additional service to encourage use of late night service hours. That service will provide reduced headways during weekday evenings (9:00 PM to 11:00 PM) at a cost of \$109,200, for a total annual Orange Line subsidy of \$380,900 (2015 dollars). The resulting annual cost of \$380,900 is the Proponent's proposed annual operating subsidy for additional train service on the Orange Line. The subsidy will be a fixed annual amount for the 15-year term of the Gaming License. It will be inflated each year by a factor of 2.5%. If the project were to open in 2018, the subsidy would range from \$410,188 in the first year to \$579,584 by 2032, for a total subsidy of \$7,355,455.

The Proponent is proposing improvements at three MBTA stations to support attainment of mode share goals for transit and to improve pedestrian and vehicular circulation around the stations. At Wellington Station, this includes dedicated curb space for proposed patron shuttles. The parking lot will be reconfigured and a fourth curb north of the existing shuttle/taxi/general auto pick-up/drop-off curb will be constructed. An additional benefit is that the reconfiguration of the parking will create additional parking spaces that generate revenue for the MBTA.

At Malden Center Station a berth for shuttle buses will be provided along the southern curb in the western bus bay. Space will be retained for a bus layover and the ability of buses to turn into the busway when the berth is occupied will be maintained. The Proponent may construct a passenger shelter on MBTA property near the corner of the busway and Centre Street (Route 60).

At Sullivan Square, improvements include creation of a new circulation pattern, including alteration and reconstruction of busways and reconfiguration of the parking field in front of the bus station. A signalized busway exit, opposite the I-93 northbound off-ramp on Cambridge Street, will be provided for right-turning buses. All buses will enter the upper busway from Maffa Way. A new signalized entrance will be constructed, allowing buses to circulate into the station from Beacham Street Extension and Main Street. Buses will circulate from the upper busway to the lower busway, exiting the station onto Maffa Way via the new signalized busway exit, with the exception of those buses with destinations via Cambridge Street westbound toward Somerville. Bus shelters will also be provided at the bus berths on the lower busway.

## Traffic and Transportation

In addition to other issues identified in the SSFEIR Scope, MassDOT requested the SSFEIR to establish a process for integrating the City of Boston's long-term plans for Sullivan Square and Rutherford Avenue and the impacts of casino-related traffic. I supported MassDOT's interest in consulting with the parties to address concerns with the mitigation and identify opportunities to address them more effectively. MassDOT initiated the planning process and convened a group of stakeholders on June 1, 2015. A second meeting was held after the SSFEIR was filed with the MEPA Office. MassDOT indicated that the meeting was productive as it provided an opportunity for MassDOT to understand concerns with respect to interim and long-term mitigation.

The SSFEIR includes an updated transportation study that conforms to MassDOT/EEA's Transportation Impact Assessment Guidelines (2014). The SSFEIR identified and clarified how and for what purpose the Synchro and VISSIM models were used in the transportation analysis. The transportation study addressed comments regarding capacity analyses for several intersections, trip distribution and corrections of some inaccuracies in graphics included in the previous submissions. The SSFEIR includes updated LOS and a summary of the 50th and 95th percentile vehicle queues for these intersections as appropriate.

As part of the SSFEIR, the Proponent has updated the analysis and the mitigation plan at Sullivan Square to address comments provided by the City of Boston. The comments centered primarily on the redistribution of traffic and the lack of an AM peak hour analysis. The results of the new analysis are not significantly different from those presented in the SFEIR and continue to indicate that the Sullivan Square area would experience worsening LOS and increased delay in both the No Build and Build conditions due to projected growth and casino impacts, respectively. With the proposed mitigation in place, the SSFEIR analysis demonstrates that traffic operations would generally return to close to No Build conditions (LOS E and F) with moderate reduction of delay in the Build conditions.

The City of Boston identifies a number of concerns with the proposed mitigation, including that traffic diversions assumed are not likely to occur at the levels assumed. The City also notes that even with the assumed diversions, much of the reduction from Build to Build with Mitigation conditions can be attributed to an assumed right turn-on-red movement from Cambridge Street. Comments also indicate that the proposed mitigation for the Broadway/Beachman Street intersection may divert even greater volumes through Sullivan Square.

The SSFEIR contains corrected networks for weekday PM and Saturday PM conditions. It did not provide intersection capacity analysis results to accompany the new networks. This issue will be addressed by MassDOT in permitting.

The Proponent should continue to work with MassDOT and the City of Boston to refine the geometric improvements and optimize traffic operations around the area. Comments from MassDOT indicate that the Proponent should pay close attention to how the proximity of the intersections could impact overall network operations, including MBTA bus operations. These

improvements may necessitate the acquisition of ROW along Cambridge Street, Spice Street, and D Street. The Proponent has indicated that they have initiated discussions with the respective property owners and expect that they will cooperate in providing the needed right-of-way upon request. MassDOT comments indicate that the proposed mitigation provides sufficient flexibility for further refinements to address its concerns at the I-93/Cambridge Street intersection and at the MBTA Sullivan Square Station.

The Proponent was also directed to assess in the SSFEIR the impact of its proposed signal timing modifications along a section of Mystic Valley Parkway (a roadway under DCR jurisdiction), between Mystic Avenue to the I-93 southbound ramp. This short section of Mystic Valley Parkway in Medford contains two signalized intersections located approximately 350 feet apart. Both of these intersections are operated by a single controller. The SFEIR proposed signal timing modifications to improve traffic flow from I-93 onto the Route 16 Southbound connector. Under current and future operations, there is limited storage space between intersections and DCR indicates that coordination is necessary to avoid queues that may extend from one intersection to another.

Analysis indicates that future volumes with mitigation (signal timing and phasing adjustments) will result in shorter queues compared to the SFEIR proposal. However, these queues will continue to exceed storage capacity during peak traffic periods. DCR notes that there is adequate space on Mystic Valley Parkway westbound, east of the I-93 southbound off-ramp, to store additional vehicles if needed.

Many commenters have suggested that the Boston Metropolitan Planning Organization's (MPO's) regional travel demand model be used to conduct modeling and analysis in light of the project's potential impact on the transportation system and the regional distribution of its trip patterns. MassDOT comments indicate that the regional travel demand model is employed to evaluate MassDOT projects that are of sufficient size and scope to alter the regional travel network. I note that MAPC has not called for this analysis and also indicate that the traffic analysis demonstrates that project impacts can be mitigated.

The railroad right-of-way (ROW) referred to in the SSFEIR as D Street is owned by Massport. Comments from Massport indicate that this ROW is not a public way and proposed improvements would require approval by Massport. In addition, the comments note that the ability to support future rail use must be maintained.

Comments from MassDOT and MAPC indicate that the SSFEIR has adequately addressed the key transportation issues during the interim period while Rutherford Avenue and Sullivan Square remain in roughly their current configuration. I note that neither MassDOT nor MAPC recommend use of the regional transportation demand model for this project.

# Mitigation and Draft Section 61 Findings

The SSFEIR contains revised and updated mitigation commitments. It identifies clear commitments to implement mitigation measures, estimates the individual costs of each proposed measure, identifies the parties responsible for implementation, and contains a schedule for implementation. All of the identified mitigation commitments should be incorporated into the Draft Section 61 Findings for the MGC license to ensure that the license accurately reflects the significant commitments to environmental mitigation identified in the MEPA process.

The Proponent has committed to the following measures to avoid, minimize and mitigate environmental impacts:

## Transportation

Annual Operating Subsidy to support additional passenger capacity on the Orange Line

• Assuming a 2018 opening, the subsidy would be \$410,188 in that starting year and \$579,584 in 2032, fifteen years later (inflated each year by a fixed factor of 2.5%, consistent with historical Cost of Living Adjustments). The total subsidy over that fifteen-year period would be approximately \$7,355,455.

## **MBTA Everett Shops**

- New Entrance:
- New Loading Dock; and,
- Easement on Surface Road.

### **MBTA Stations**

- Improvements to MBTA's Wellington Station to accommodate Wynn patron shuttle service at curbside;
- Improvements to MBTA's Malden Center Station to accommodate Wynn patron shuttle service at curbside; and,
- Improvements to MBTA's Sullivan Square Bus Station to accommodate new traffic patterns and road alignments.

## Offsite Improvements - Everett

1. Revere Beach Parkway (Route 16)/Mystic View Road/Santilli Highway/Route 99 Connector Improvements (Santilli Circle): Modify the approach from Frontage Road into the rotary to allow for two formal lanes; Widen circle at Santilli Highway approach to allow for three travel lanes; Provide improved pedestrian and bicycle connection from Frontage Road to Mystic View Road; Reconfigure channelizing island on south side of rotary near Mystic View Road; Provide traffic signal improvements at the signalized locations around the traffic circle; Provide landscaping improvements to the center of the circle; Provide new guide signage and pavement markings;

and, perform RSA into final design, where feasible; Coordinate with MassDOT to indentify funding source of RSA recommendations. Work will be completed prior to opening.

2. Route 16/Broadway/Main Street (Sweetser Circle): Reconstruct circle and approaches to function as a two-lane modern roundabout; Reconfigure the existing Broadway (Route 99) northbound approach to allow for three travel lanes providing free flow access to Route 16 eastbound; Provide shared use path on northwest side of rotary to improve bicycle access; Install new signing to provide direction to bicyclists on how to navigate the rotary safely; Provide landscaping and improvements on the north side of the circle; and, maintain pedestrian signal across Route 16 eastbound exit from rotary. Work will be completed prior to opening.

At the following locations (3-11) the Proponent has committed to: Reconstruct Lower Broadway as a 4-lane boulevard with turn lanes at major intersections; Upgrade/replace/install traffic control signals; Reconstruct sidewalks and bicycle lanes where required; Install street trees and lighting; Improve MBTA bus stops along Lower Broadway; Installation of technology along Broadway/Alford Street (Route 99), near project entrance, to allow for signal prioritization for buses.

- 3. Broadway/ Beacham Street
- 4. Broadway/ Horizon Way
- 5. Broadway/ Lynde Street
- 6. Broadway/ Thorndike Street
- 7. Bow Street/Mystic Street
- 8. Bow Street/Lynde Street
- 9. Bow Street/Thorndike Street
- 10. Beacham Street/Robin Street
- 11. Broadway/ Bowdoin Street
- 12. Broadway/ Norwood Street/Chelsea Street: The Proponent will optimize traffic signal timing, phasing and coordination.
- 13. Lower Broadway Truck Route: Upgrade Robin Street and Dexter Street to serve as a truck route; Provide full depth reconstruction of the existing roadway to accommodate heavy vehicles; Reconstruction of Robin Street and Dexter Street to include heavy-duty pavement, corner radii improvements, sidewalk reconstruction (where present), drainage system modifications (minor), signs and pavement markings.
- 14. Ferry Street/Broadway (Route 99): Traffic signal retiming and optimization.

Offsite Improvements - Medford

1. Mystic Valley Parkway (Route 16)/Fellsway (Route 28)/Middlesex Avenue (Wellington Circle): Upgrade/replace traffic signal equipment/signs/pavement markings; Optimize traffic signal timing, phasing and coordination; Widen Route 28 northbound to provide an additional left turn lane; Widen Route 16 westbound to provide an additional through lane in the middle of

the intersection; Reconstruct noncompliant sidewalks and accessible ramps around the intersection to improve pedestrian access; Provide landscape improvements.

- 2. Mystic Valley Parkway (Route 16)/Route 16 Connector: Traffic signal retiming and optimization.
- 3. Mystic Valley Parkway (Route 16)/Mystic Avenue: Traffic signal retiming and optimization.

The Proponent has committed to contribute \$1.5 million to a study of long-term improvements for Wellington Circle.

Offsite Improvements - Boston

- 1. Alford Street/Main Street/Sever Street/Cambridge Street (Sullivan Square) and at
- 2. Cambridge Street/I-93 northbound off-ramp: The Proponent has committed to: Optimize signal timing for Maffa Way/Cambridge Street; interconnect and coordinate traffic signals, widen the Main Street approach to provide two lanes; Reconstruct busway between Cambridge Street and Maffa Way; Reconstruct the southbound approach of Alford Street at Cambridge Street; Install new traffic signals at Cambridge Street/Spice Street/MBTA Busway and Maffa Way/Busway; Upgrade/replace traffic signal equipment/signs/ pavement markings; Optimize traffic signal timing, phasing and coordination; Reconstruct Spice Street and D Street; Reconstruct sidewalks on west side of rotary between Sullivan Square station and Alford Street Bridge; Reconstruct sidewalks and upgrade lighting and streetscape in rotary between Cambridge Street and Main Street (east); Provide bicycle lanes on Cambridge Street; Reconstruct MBTA lower busway and parking area at Sullivan Square station, including new traffic signal at Maffa Way/station entrance; Construct BUS ONLY left-turn lane from Main Street into Sullivan Square Station.
- 3. Traffic Signal Interconnect Conduit from Sullivan Square to Austin Street: Install conduit, pullboxes, and wiring.
- 4. Dexter Street/Alford Street (Route 99): Upgrade/replace traffic signal equipment/signs/pavement markings; and, Optimize traffic signal timing, phasing, and coordination.
- 5. Rutherford Avenue (Route 99)/Route 1 Ramps: Optimize traffic signal timing and phasing.
- 6. Sullivan Square Landscaping: Improve landscaping within the rotary at Sullivan Square and immediately north of the rotary adjacent to Rutherford Avenue

Long-term Commitment to Sullivan Square: Provide payments of \$2.5 million per year into the Sullivan Square mitigation fund (\$25 million over 10 years); Provide payments to the City of Boston for each vehicle above Friday afternoon and evening period projections \$20,000 per additional vehicle trip, not to exceed \$20,000,000 over 10 years; Monitor and Report no later than 30 days after the first anniversary of Project opening and for 10 years.

# Offsite Improvements - Revere:

1. Route 16/Route 1A/Route 60 (Bell Circle): Upgrade/replace traffic signal equipment/signs/pavement markings; and, Optimize traffic signal timing, phasing and coordination.

# Offsite Improvements - Chelsea:

- 1. Route 16/Washington Avenue: Upgrade/replace traffic signal equipment/signs/pavement markings; optimize traffic signal timing, phasing and coordination.
- 2. Route 16/Everett Avenue and 3. Route 16/Webster Avenue: The Proponent has committed to optimize traffic signal timing, phasing and coordination.

## Transportation Demand Management

- Membership Fee with a Transportation Management Association
- Employ a designated Transportation Coordinator for the Project to coordinate efforts, monitor success rates, and manage strategic implementation of traffic reduction programs;
- Schedule employee shift beginnings and endings outside specified peak traffic periods;
- Carpool/vanpool matching programs;
- Dissemination of promotional materials, including newsletters about TDM program in print at the Project's onsite Transportation Resource Center, and online;
- Orange Line Shuttle Service to Wellington and Malden Center stations and associated improvements to support curbside shuttle service at Wellington Station and Malden Center Station;
- Neighborhood Shuttle Buses;
- Employee Shuttle Buses;
- Premium Park & Ride Shuttle Buses;
- Neighborhood Shuttle Buses;
- Water shuttle service to the Project Site- customized ferry vessels to support passenger transport between the project site and key Boston Harbor sites;
- On-site Full Service MBTA Fare Vending Machine;

- Participation in the MBTA Corporate Pass Program to the extent practical and as allowable pursuant to commercial tenant lease requirements;
- Electric vehicle charging stations within the proposed parking garage;
- Car sharing services in the garage at the Project Site;
- Preferential parking for car/vanpools and alternatively fueled vehicles;
- Offering a "Guaranteed-Ride-Home" in case of emergency to employees that commute to the Project by means other than private automobile;
- Monitoring and reporting program for post-development traffic and parking monitoring and employee survey program for \$30,000 annually; and,
- Monitoring of post-development motor vehicle traffic counts at Sullivan Square as well
  as additional locations to determine where Project related trips through Sullivan Square
  exceed projects during the Friday afternoon peak hour at a cost of \$20,000 per year for 10
  years.

#### Wastewater

- Financial contribution to remove Infiltration and Inflow (I/I) equivalent to 4 gallons removed for every gallon of new wastewater generated;
- Install grease traps and gas/oil separators.

#### Water Use

- Incorporates water conservation measures consistent with LEED requirements, including efficient plumbing fixtures, low-flow lavatory faucets and showerheads.
- Rainwater harvesting, grey water reuse and landscaping alternatives;
- Use timers, soil moisture indicators and rainfall sensors to reduce potable water use on landscaping;

#### Wetlands, Waterways and Water Quality

- Create public access and amenities, including a water transportation dock and continuous harborwalk;
- Remediation, revegetation and enhancement of 550 linear feet of existing shoreline with enhanced living shoreline;
- Removal of invasive vegetation and planting of native herbaceous and shrub vegetation along part of existing Coastal Bank and Riverfront Area;
- Consultation with MassDEP to develop specifications for the living shoreline and bank restoration.

- Transformation of 10,900 +/- SF of disturbed Coastal Beach/Tidal Flats, Coastal Bank, and Riverfront Area to Salt Marsh;
- Dredging to remove contaminated sediments from the harbor bottom and to provide ample draft for water transportation, recreational vessels and a proposed floating dock;
- Debris clean up within LUO, Coastal Beach and Coastal Bank resource areas;
- Replacement of existing bulkhead and construction of new bulkheads within areas of existing degraded Coastal Beach and Coastal Bank areas;
- 100% of the ground floor will be FPAs;
- Extension of the harborwalk off-site to the DCR Gateway Park and to Broadway including construction of a multi-use path, benches, signage, bicycle racks, plantings and lighting; and,
- Contribution of \$250,000 to DCR for planning and engineering of a potential pedestrian bridge linking Somerville and Everett over the Mystic River.

#### Stormwater

- Best Management Practices (BMPs) such as pavement sweeping, deep sump catch basins, tree box filters, filtering bioretention areas, four (4) proprietary stormwater separators, and stormwater media filters will be constructed. These BMPs will be designed to remove at least 80 percent of the average annual load of Total Suspended Solids (TSS)
- Catch basins, silt fences, hay bales and crushed stone will be used during construction to prevent sediment removal from entering runoff
- Offsite mitigation measures associated with transportation improvements may include bioretention or subsurface infiltration chambers, deep sump catch basins or proprietary stormwater separators.

#### GHG Emissions

- Buildings designed to be LEED-certifiable at the Gold level or higher;
- Energy Efficiency Measures (EEM) estimated to reduce CO<sub>2</sub> emissions from stationary sources for the building by18.4% relative to ASHRAE 90.1-2010, or for the entire Project Site (including buildings, garage ventilation, and lighting, exterior lighting an water/wastewater utilities) by 27.4% relative to ASHRAE 90.0-2010 standards, which will include:
  - Cool roofs:
  - Central chiller plant with better efficiency than Code;
  - Demand Control Ventilation (DCV) for the casino, public entertainment, and retail areas;
  - Energy Recovery Ventilation (ERV) to reduce chiller energy use;
  - Building envelopes with roof and window insulation better than Code;
  - Skylights over the entry atrium and along the retail promenade (daylighting controls will be tied to this extensive system of skylights);
  - Lower light power density 20% better than Code;
  - At least 80% of the total to be Low-energy Electronic Gaming Machines (EGMs);
  - Metal halide lighting for all parking structures;

- High efficiency elevators with regenerative VVVF drives and LED lights;
- Demand Control Exhaust Ventilation (DCEV) with variable frequency drive (VFD) fans for enclosed parking structures and metal halide lighting for all parking structures;
- Kitchen and restaurant refrigeration energy efficiency design to reduce energy use:
- Energy-STAR appliances;
- Enhanced building commissioning; and
- Occupancy controls for non-occupied or infrequently occupied spaces.
- PV system on the podium building roof or other locations, and/or purchase from local service providers of Green Power of annual electric consumption equaling 10% of the Project's annual electrical consumption;
- Cogeneration plant using a nominal 1- MW microturbine, providing approximately 20% of the Project's annual electrical consumption (the cogeneration plant is capable of providing 6,307 MWhr/year of on-site electrical generation, supporting 780 tons of absorption cooling, and providing up to 50 percent of the Project's annual heating and hot water needs); and,
- Intersection improvements to reduce vehicle idling and TDM measures to reduce trips will reduce Project-related motor vehicle CO<sub>2</sub> emissions by 13.0%.

# Climate Change Adaptation and Resiliency

- Elevate proposed structures the proposed structures non-service and garage floor elevations to 15 to 16 feet above the 100-year flood level.
- Parking garages entrances and other openings into below grade spaces will be elevated, as noted above, or incorporate sufficient flood—proofing to avoid damage from coastal storms; and
- Critical infrastructure and HVAC equipment will be elevated above projected flood levels
- The Proponent will consider additional measures during subsequent design including, but not limited to: rain gardens and swales; protection for service equipment (HVAC, electrical, fuel, water, sewage); installation of back-water flow values and sump pumps; protection of entrances from snow and ice; enhanced building insulation; cool/green roofing; resilient back-up power and systems; backup power sources for elevators; insulation of refrigeration equipment; and, elevation of utility hook-ups, mechanical devices, electrical service panel, water heaters, and IT services above potential flood levels.

# Air Quality

- Commitment to a robust and comprehensive TDM program supported by the TMP (described in TDM section above).
- Commitment to consult with MassDEP regarding the CHP system prior to filing a permitting application.

## Responses to Comments

The SSFEIR contains copies of each comment letter received during the review of the SFEIR. The SSFEIR also provides a specific response to each comment letter received and presents additional narrative and/or quantitative analysis when needed to respond to the comments received to the extent that they were within MEPA jurisdiction. In some instances the Proponent also references sections of the SSFEIR, such as reference to the traffic analysis and methodology, where a reference to larger sections is appropriate.

### Conclusion

The purpose of MEPA is to provide meaningful opportunities for public review of the potential environmental impacts of Projects for which Agency Action is required, and to assist each Agency in using (in addition to applying any other applicable statutory and regulatory standards and requirements) all feasible means to avoid Damage to the Environment or, to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable. MEPA does not approve or deny a project. It is an administrative process that is subject to public review and comment. The MEPA process itself does not result in any formal adjudicative decision approving or disapproving a Project. The determination that a review document is adequate means that the Proponent has adequately described and analyzed the Project and its alternatives, and assessed its potential environmental impacts and mitigation measures.

In regard to a Final EIR, the MEPA regulations (301 CMR 11.08 (8)(c)) indicate that the Secretary shall:

- 1) determine that a final EIR is adequate, even if certain aspects of the Project or issues require additional analysis of technical details, provided that the Secretary finds that the aspects and issues have been clearly described and their nature and general elements analyzed in the EIR or during MEPA review, that the aspects and issues can be fully analyzed prior to any Agency issuing its Section 61 Findings, and that there will be meaningful opportunities for public review of the additional analysis prior to any Agency taking Agency Action on the Project; or
- 2) determine that the final EIR is inadequate and require the Proponent to file a supplemental final EIR in accordance with 301 CMR 11.07.

The SSFEIR addresses each of the Scope items identified in the April 3, 2015 Certificate on the Supplemental FEIR. Comments from State Agencies do not identify issues that warrant additional analysis in a Supplemental EIR. Additional analysis, consultation and review are necessary to finalize mitigation and will continue through project permitting.

Based on a review of the SSFEIR and consultation with State Agencies, I find that the SSFEIR adequately and properly complies with MEPA and its implementing regulations. The Proponent and State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12. I note that the Proponent may be required to file one or more Notices of Project Change (NPC) if there is a material change to the project that will increase environmental impacts prior to the completion of Agency Actions for the project.

August 28, 2015
Date

## Comments Received:

8/14/15	MWRA
8/21/15	City of Somerville
8/21/15	Maura Healey, Attorney General
8/21/15	City of Malden
8/21/15	Salvatore LaMattina, Boston City Council
8/21/15	Representative Daniel Ryan
8/21/15	City of Boston
8/21/15	MassDOT
8/21/15	Massport
8/21/15	MAPC
8/21/15	City of Revere
8/21/15	City of Everett
8/21/15	MassDEP
8/26/15	MA Division of Marine Fisheries
8/27/15	City of Medford
8/28/15	DCR
7/27/15	Charlestown Waterfront Coalition
7/31/15	Barry Kleinman
8/5/15	Linda Sheldon
8/6/15	Louise A. Zawodny
8/7/15	Stephen Kaiser
8/8/15	Ivey St. John
8/11/15	Laura Mackey
8/11/15	William McGee
8/12/15	Liz Levin & Co.
8/13/15	Margaret Riley
8/14/15	Jim Grafmeyer, DDR Corp.
8/14/15	Lynn Levesque
8/17/15	Claire Lupton
8/17/15	Fay Donohue

8/18/15	ELM, MyRWA, BGT
8/18/15	Harry Ostrander
8/18/15	William Lamb Design Review Committee
8/19/15	Alice Krapf
8/19/15	Annette Tecce
8/19/15	Antonia Pollak
8/19/15	Bart Higgins & Charlene Liska
8/19/15	Boston Harbor Association
8/19/15	Daniel Kovacevic
8/19/15	Karyn Wilson
8/19/15	Louis W. Mian, Jr.
8/19/15	Whittemore-Wright Co. Inc.
8/19/15	Kevin Broderick
8/19/15	Louis W Mian, Jr.
8/19/15	Cynthia Wisniewski
8/20/15	Evmorphia Stratis
8/20/15	Friends of Middlesex Fells Reservation
8/20/15	Judith McDonough
8/20/15	Linda Ordough
8/20/15	Mary Walsh
8/20/15	MassBike
8/20/15	Thomas Annaratone
8/20/15	Toby Goldstein
8/20/15	Vincent Ragucci
8/21/15	Ann Kelleher
8/21/15	Bike to the Sea
8/21/15	Chris Remmes
8/21/15	Devon Moos, East Somerville Main Streets
8/21/15	Diane Valle
8/21/15	Elmer Lupton
8/21/15	Evelyn Addante
8/21/15	Frederick Salvucci (1)
8/21/15	Frederick Salvucci (2)
8/21/15	Gardens for Charlestown
8/21/15	Linda Maloney
8/21/15	Marlene Zizza
8/21/15	Nancy Wovers Cadene
8/21/15	Nicole Payne
8/21/15	Paul Dobbins
8/21/15	Richard Eliseo
8/21/15	Rosemary Kverek
8/21/15	Pru Chapman
8/21/15	Steffen and Nancy Koury
8/21/15	Federal Realty Trust
8/21/15	Alan Moore
8/21/15	Somerville Bicycle Advisory Committee
0/21/13	Sometime Biojole Mayisory Committee

8/21/15	Border to Boston et al
8/21/15	Kenneth Krause
8/21/15	MyRWA
8/21/15	John Vitagliano
8/21/15	Wig Zamore
8/21/15	Seta K Wehbe
8/21/15	Sal DiDomenico
8/21/15	Friends of Community Path
8/21/15	Bathsheba Grossman
8/21/15	Hispanic American Institute
8/21/15	Kevin Mehigan & Jere Getchall
8/21/15	Everett United
8/21/15	Mary Berghello
8/21/15	Ann Vertullo
8/21/15	Phylis Polci
8/21/15	Mary Rocco
8/21/15	Lessy Campbell
8/21/15	Josephine Wilson
8/21/15	Charles DiPerri
8/21/15	Maureen O'Brien
8/21/15	Everett Villa Coop Resident (1)
8/21/15	Jo Hooi
8/21/15	Julia P
8/21/15	Everett Villa Coop Resident (2)
8/21/15	Hazel O'Neil
8/21/15	Robyn S
8/21/15	Mary Bargarello
8/24/15	Unite Here! Local 26 – signed petition
8/26/15	A Better City (ABC)
8/27/15	Paul Morceau

775 form letters "I respectfully urge you to approve the Wynn plan..." from 7/27/15 to 8/26/15

